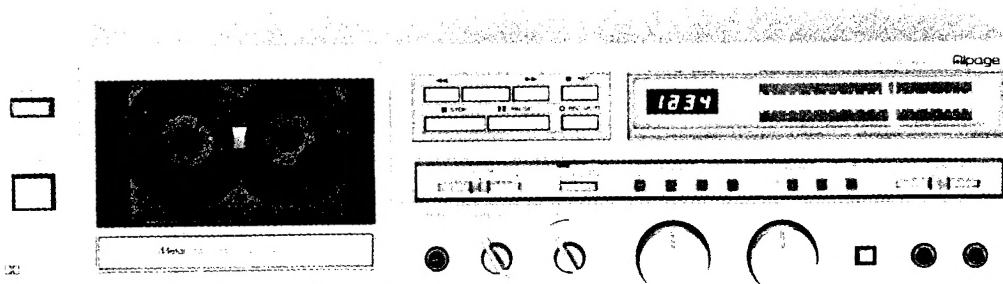
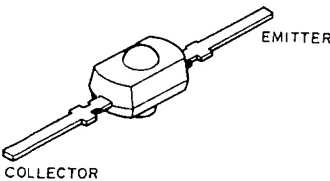
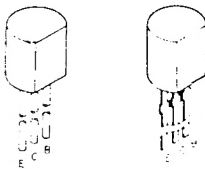

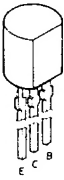

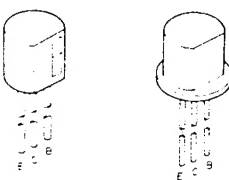


SERVICE MANUAL **Alpage**

STEREO CASSETTE DECK **AL60**



ALPINE ELECTRONICS INC.

| | | |
|--|--|---|
| <p>TPS605: Q1</p>  | <p>2SC1318NC-R or 2SC509: Q101, 401, 402, 551, 552, Q553, 603, 604, 605 2SA921: Q902</p>  | <p>2SD880-Y: Q102, 103 2SC235-Y or 2SD880-Y: Q901</p>  |
| <p>2SC945L-P or 2SC1815-GR or 2S1815-Y: Q201, 202, 301 to 320, 403, Q404, 405, 406, 501, 502, Q601, 602, 606, 903 2SC1815-Y: Q651</p>  | <p>2SC1890E,F or 2SC1980-T: Q203 to 206, 555, 556</p>  | <p>22SA733(P): Q904, 905, 906 2SC900E or 2SC732BL: Q207 to 210</p>  |

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TEL. 0246-36-4111, TELEX 8927-61

Contents

| | |
|--|----------|
| Specifications | 2 |
| Parts Locations and Disassembly Instructions | 3 to 5 |
| Adjustment Procedures | 6 to 7 |
| Adjustment Locations | 7 |
| Block Diagram | 8 |
| Replacement of Mechanical Parts | 8 to 9 |
| Trouble Shooting | 10 to 11 |
| Parts Layout on P.C. Board | 12 to 18 |
| Wiring Diagram | 19 to 20 |
| Schematic Diagram (1/2) | 21 to 22 |
| Schematic Diagram (2/2) | 23 to 24 |
| Electrical Parts List | 25 to 34 |
| Packing Method View | 35 |
| Packing Assembly Parts List | 35 |
| Cabinet Assembly Parts List | 36 |
| Exploded View (Cabinet) | 37 to 38 |
| Exploded View (Cassette Deck) | 39 to 40 |
| Cassette Deck Assembly Parts List | 41 |
| Semiconductor Lead Identifications | 42 to 44 |

Specifications

| | |
|---|--|
| Tape Speed (MTT-111) | 4.76 cm/sec. \pm 1.5% |
| Wow & Flutter (JIS WTD) (MTT-111) | 0.07% |
| FF/REW Time (C-60) | 100 sec. |
| Rec/Play Head | Sen Dust Core |
| Erase Head | Double Gaps Ferrite Core |
| Input Sensitivity/Impedance | Mic: 0.3mV/600 ohm Line: 100mV/50K ohm |
| Signal to Noise Ratio | 55 dB |
| Distortion | 2% |
| Frequency Response | 31.5 Hz to 14 KHz |
| Stereo Separation | 35 dB |
| Crosstalk | 60 dB |
| Input Power | 25W |
| Input Voltage | 110/127/220/240V AC 50/60 Hz (Multi voltage Model) 120V AC 60 Hz (Single voltage Model) |
| Output Level/Impedance | Line: 500mV/100K ohm Headphone: 65mV/8 ohm |
| Take Up Torque | 35 ~ 60 gcm |
| Semi-conductors | 18 IC's, 60 Transistors, 48 Diodes, 3 Zener Diodes, 1 Bridge Diode |
| Dimensions (W x H x D) | 435 x 116 x 254mm |
| Weight | 5.3 Kg |

Parts Location and Disassembly Instructions

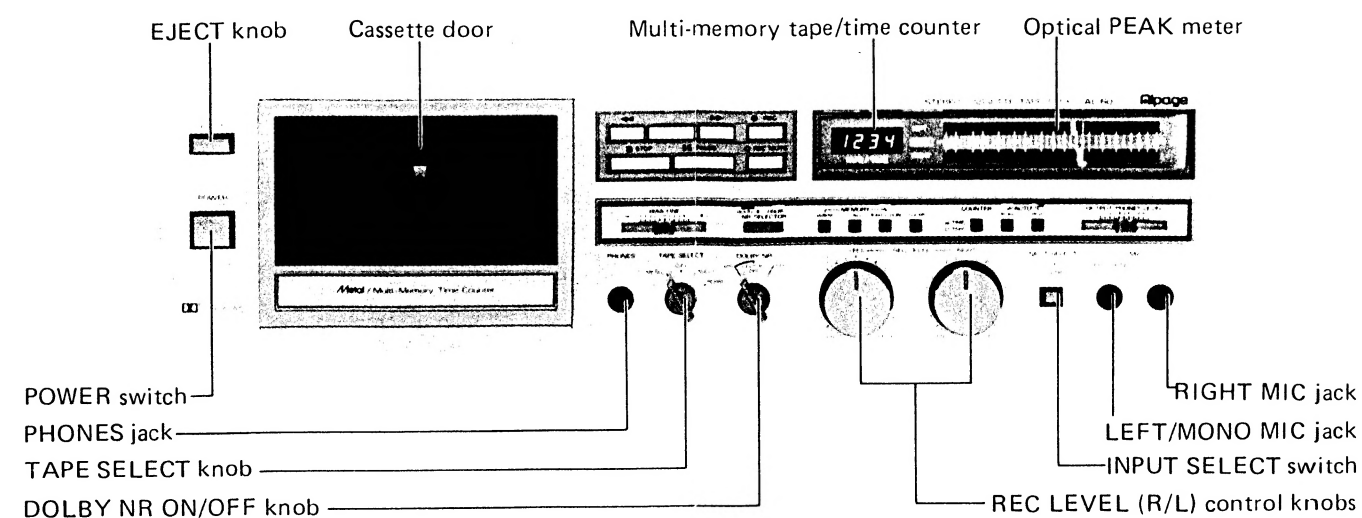


Figure 1

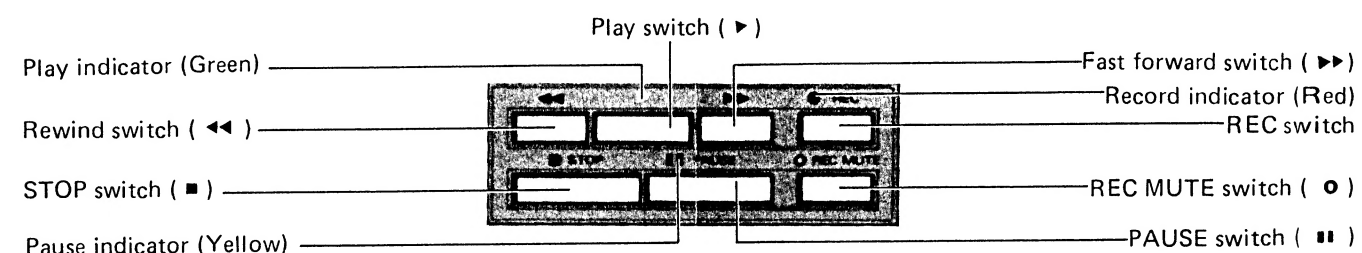


Figure 2

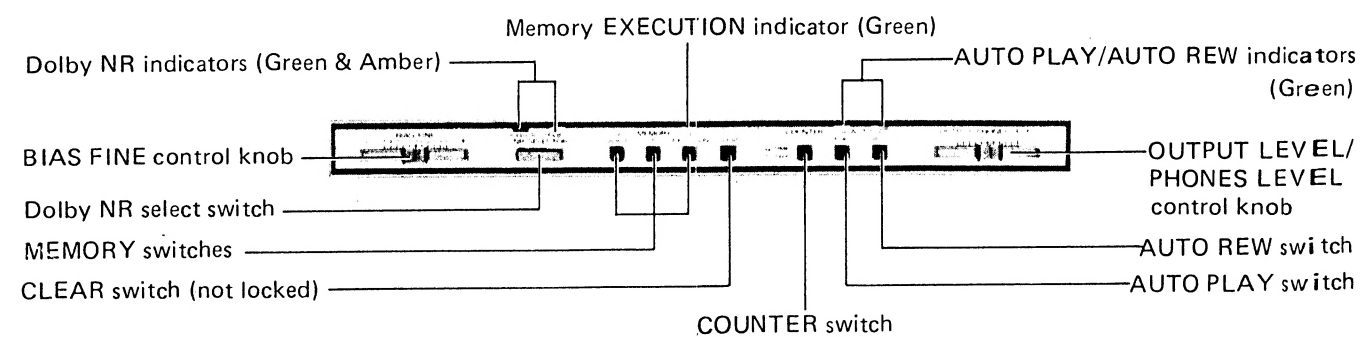


Figure 3

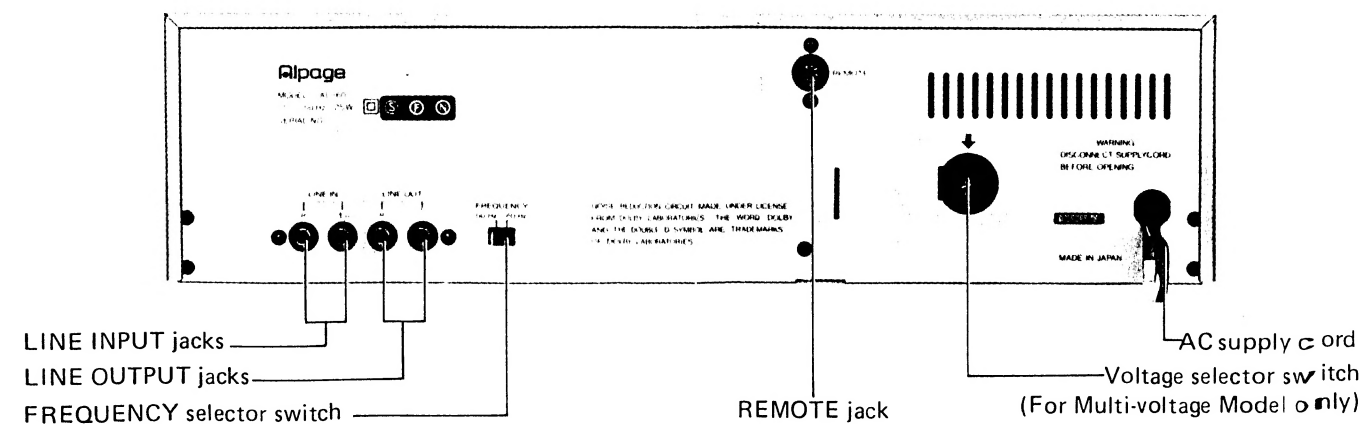


Figure 4

1. Removal of Top Cover

- (1) Remove six screws marked "○" as shown in Figures 5 and 6.
- (2) Remove the top cover in the direction of the arrow as shown in Figure 5.

2. Removal of Front Panel with Keyboard

- (1) After removal of top cover, pull out six knobs as shown in Figure 5.
- (2) Remove the cassette door upward as shown in Figure 5.
- (3) Remove seven screws marked "△" as shown in Figures 7 and 8.
- (4) Disconnect all wires from the Keyboard switch P.C. Board.
- (5) Remove the front panel, with Keyboard switch P.C. Board.

3. Removal of Rear Cover

- (1) Remove five screws marked "⊕" as shown in Figure 6.
- (2) Remove four tacks as shown in Figure 6.
- (3) Remove the rear cover.

4. Removal of Master Board P.C. Board

- (1) After removal of rear cover, remove four screws marked "□" as shown in Figure 7.
- (2) Remove three jack stoppers as shown in Figure 9.
- (3) Remove four nuts as shown in Figure 9.
- (4) Disconnect all wires from the P.C. Board.

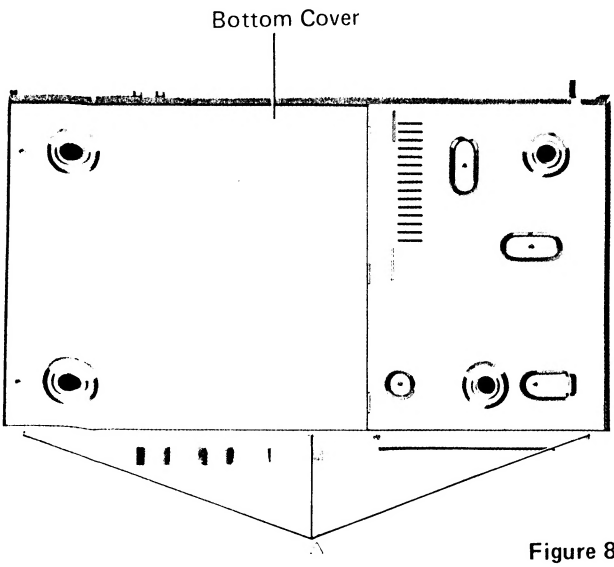


Figure 8

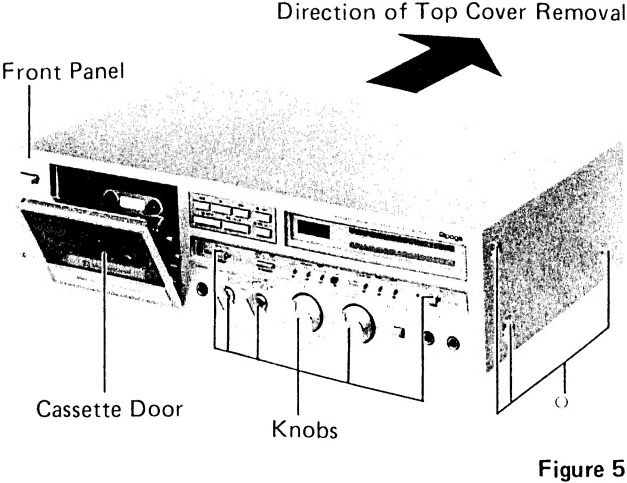


Figure 5

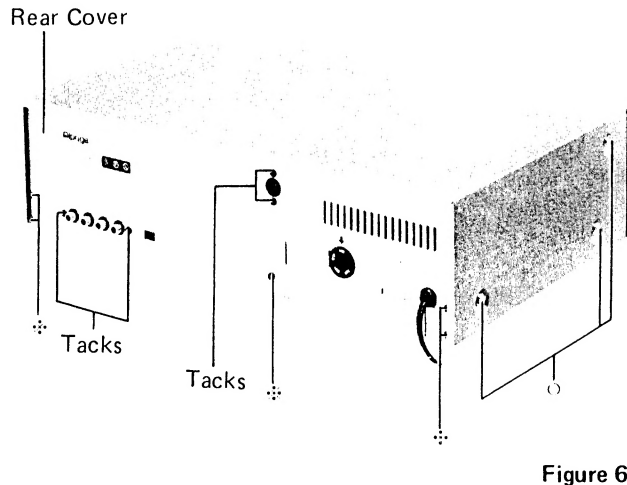


Figure 6

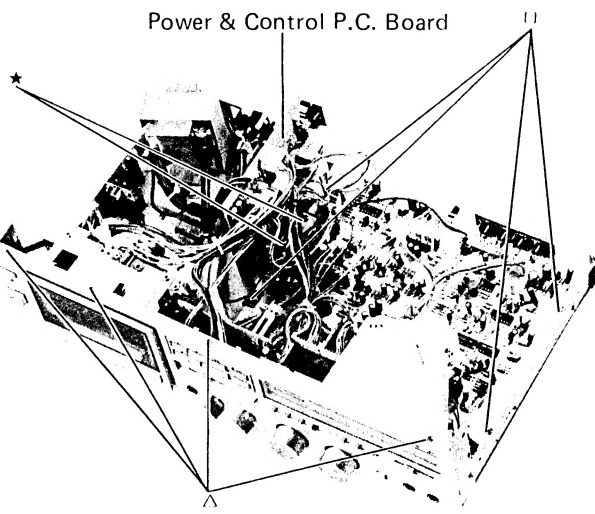


Figure 7

5. Removal of Power & Control P.C. Board

- (1) After removal of top cover and rear cover, remove two screws marked "★" as shown in Figure 7.
- (2) Disconnect all wires from the P.C. Board.

6. Removal of Switch & Volume P.C. Board

- (1) After removal of top cover and front panel, remove five screws marked "▲" as shown in Figure 9.
- (2) Disconnect all wires from the P.C. Board.

7. Removal of Optical Meter with FL. Counter & Lamp P.C. Board

- (1) After removal of top cover and front panel, remove three screws marked "⊥" as shown in Figure 10.
- (2) Disconnect all wires from the FL counter and Lamp P.C. Board.
- (3) Remove the optical meter with FL counter and Lamp P.C. Board.

8. Removal of Cassette Deck

- (1) Remove the top cover (Refer to page 4).
- (2) Push EJECT button to open the cassette door.
- (3) Pull the cassette cover ① in the direction of the arrow as shown in Figure 11 to take it off from the deck.
- (4) Remove five screws (② to ⑥) as shown in Figure 11 to take off from the deck.
- (5) Remove the connector ⑦ to take off from the cassette deck as shown in Figure 11.
- (6) Remove the connectors ⑧ and ⑨ from waster board P.C. Board as shown in Figure 11.
- (7) Remove the connector ⑩ from power & control P.C. Board as shown in Figure 11.
- (8) Remove the connectors ⑪ and ⑫ from power & control P.C. Board to take off the cassette deck from inside the set as shown in Figure 12.

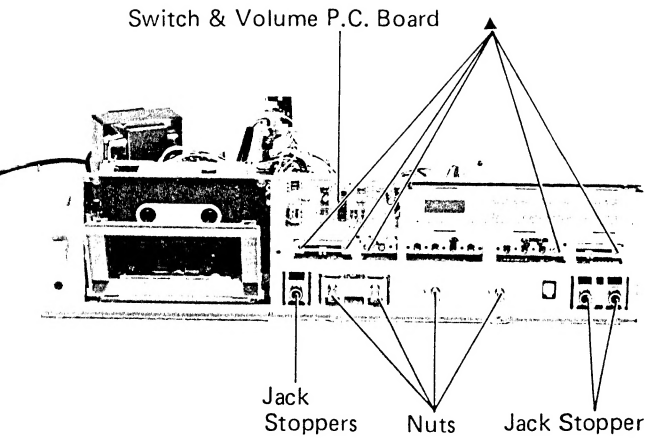


Figure 9

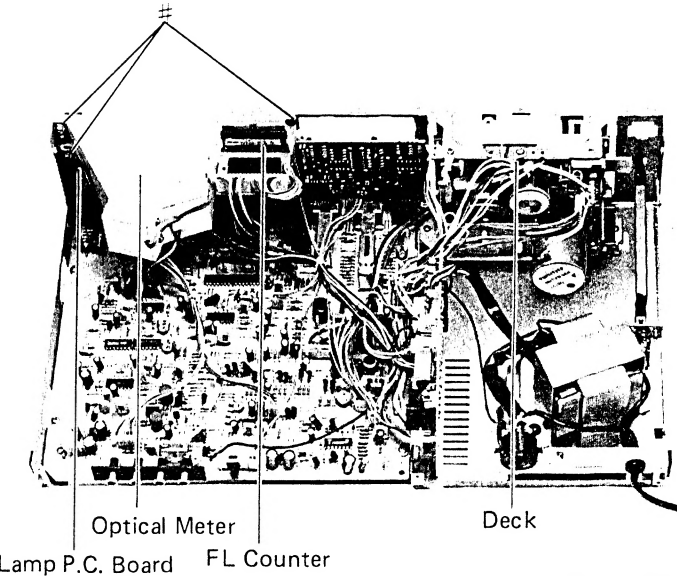


Figure 10

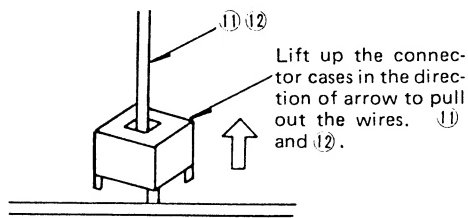


Figure 12

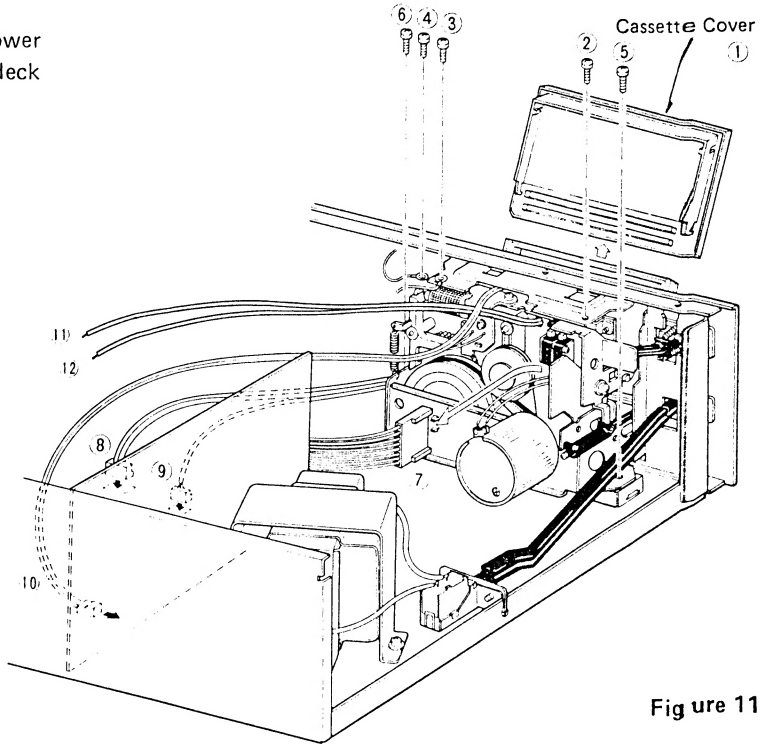


Figure 11

Adjustment Procedures

| STEP | DESCRIPTION | | | MODE (SWITCH) | ADJUST POINTS | TEST POINTS | CONNECTION INSTRUCTION | REMARKS | |
|------|----------------------------|---|-------------------------------|--------------------------------|---|---------------------------|---------------------------|---|--|
| 1 | Head Azimuth Adjustment | | | Play Tape: Nor NR: Off | Head Azimuth Screw (Figure 14) | Line Out | Figure 13 | Test Tape: MTT-114 Adjust for Maximum Output VR: Max (VR401) | |
| 2 | Dolby Level Adjustment | ① | Encode Level Adjustment | Record Tape: Nor NR: Off | VR503 VR504 | T.P.1 T.P.2 | Figure 15 | Line Input: 400 Hz, 300mV Test Point Output: 580mV | |
| | | | | | VR303 VR304 | T.P.3 T.P.4 | Figure 15 | Test Point Output: 580mV | |
| | | ② | Decode Level Adjustment | Play Tape: Nor NR: Off | VR201 VR202 | T.P.3 T.P.4 | Figure 16 | Test Tape: MTT-150 Test Point Output: 580mV | |
| | | | | | VR301 VR302 | T.P.1 T.P.2 | Figure 16 | Test Point Output: 580mV | |
| 3 | Input Adjustment | | | Record Tape: Nor NR: Off | VR503 VR504 | Line Out | Figure 15 | Line Input: 400 Hz, 300mV Test Point Output: 500mV | |
| | Level Meter Adjustment | | | Record Tape: Nor NR: Off | VR403 VR404 | Level Meter Reading | Figure 15 | Line Input: 400 Hz, 300mV Adjust for 0 dB | |
| 4 | Recording Level Adjustment | | | Record Tape: Nor NR: Off | VR501 VR502 | T.P.5 T.P.6 | Figure 15 | Line Input: 400 Hz, 300mV Line Output: 500mV Test Point Output: 4.5mV Bias Cut: Remove a connector "CB901" (See Adjustment Location) | |
| 5 | Recording Bias Adjustment | | | ① | Record Tape: Metal NR: Off | VR555 VR556 | T.P.5 T.P.6 | Figure 17 | Input: Non Test Point Output: 100mV |
| | | | | ② | Record Tape: CrO ₂ NR: Off | VR557 VR558 | T.P.5 T.P.6 | Figure 17 | Input: Non Test Point Output: 55mV |
| | | | | ③ | Record Tape FeCr NR: Off | VR559 | T.P.5 T.P.6 | Figure 17 | Input: Non Test Point Output: 50mV |
| | | | | | Record Tape : Nor NR: Off | VR553 | T.P.5 T.P.6 | Figure 17 | Input: Non Test Point Output: 45mV |

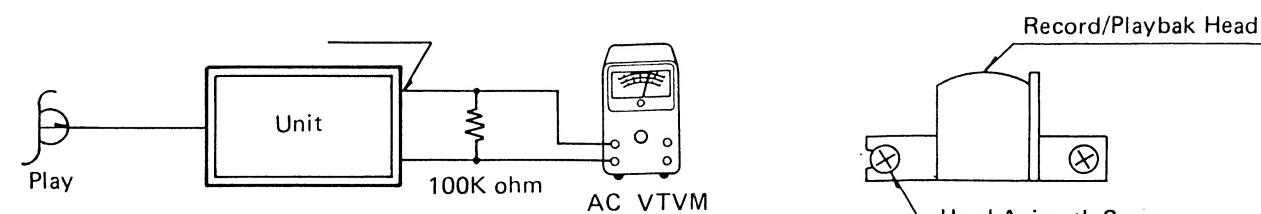


Figure 13

Figure 14

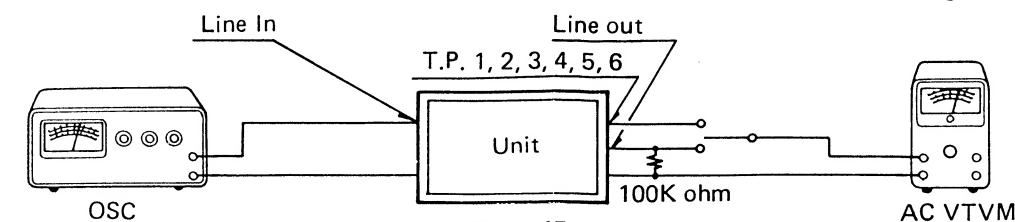


Figure 15

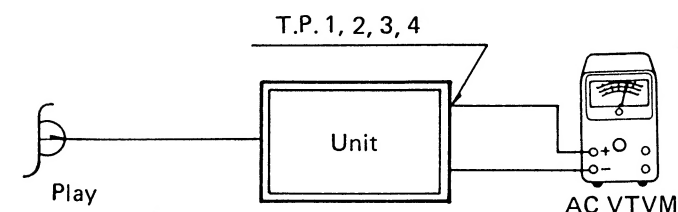


Figure 16

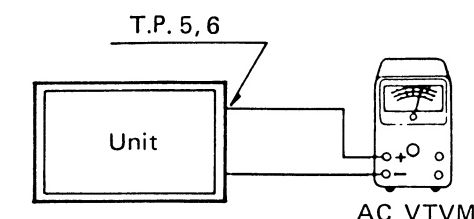
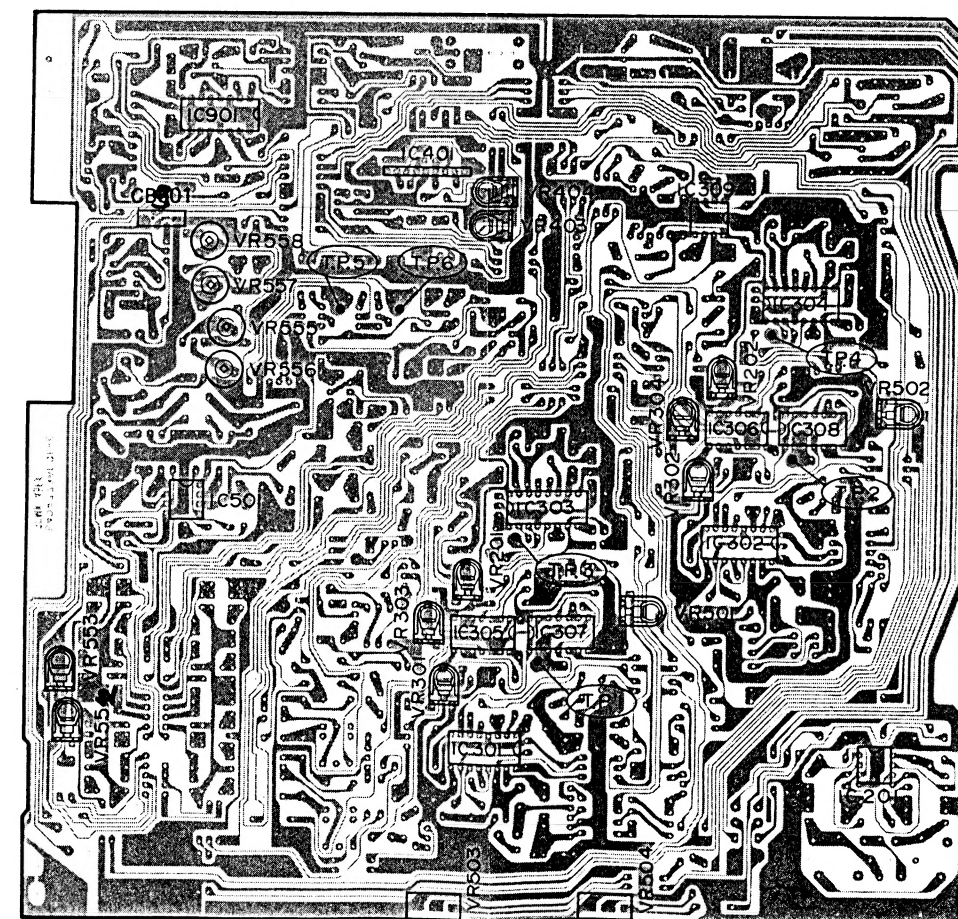


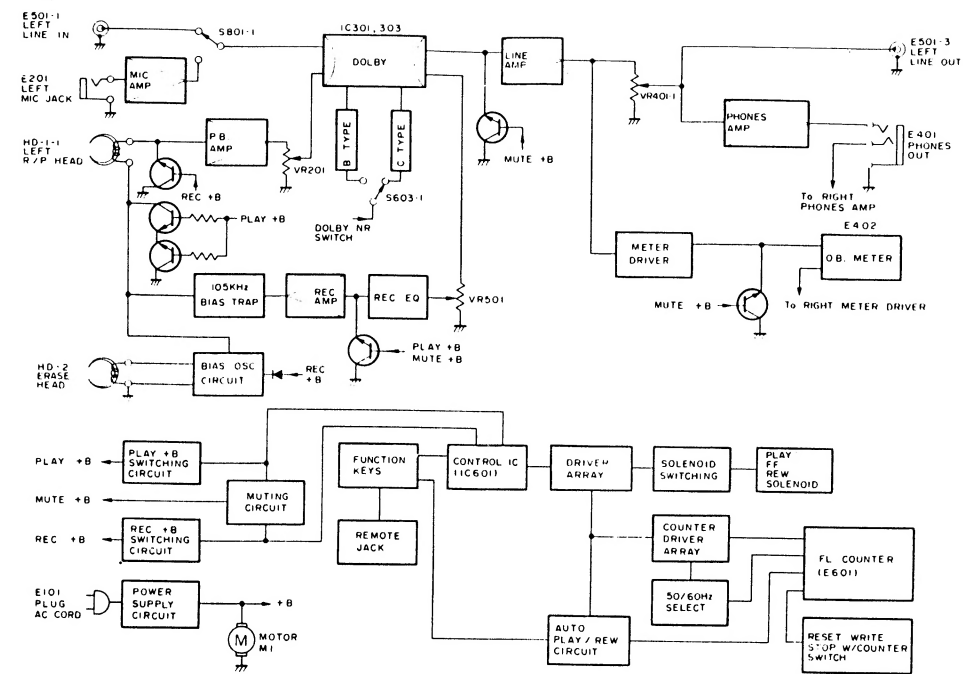
Figure 17

Adjustment Locations



Master P.C. Board

Block Diagram



Replacement of Mechanical Parts

Removal of Cassette Deck

- (1) Remove the cassette deck. (Refer to page 5)

Replacement of Head

- (1) Remove two screws marked "▲" from the cassette door bracket of the cassette deck as shown in Figure 19, and the cassette door can be removed.
- (2) Remove two screws marked "□" and wires from both sides of the recording head "A" as shown in Figure 18, and it can be removed. Remove two screws marked "■" and wires from both sides of the erase head "B" as shown in Figure 18, and it can be removed.
- (3) After replacement with a perfect head, put it together in the opposite way to disassembly.
- (4) After finishing assembling, adjust head azimuth with test tape (MTT-114). (Refer to page 6)
Apply screw lock after adjustment.

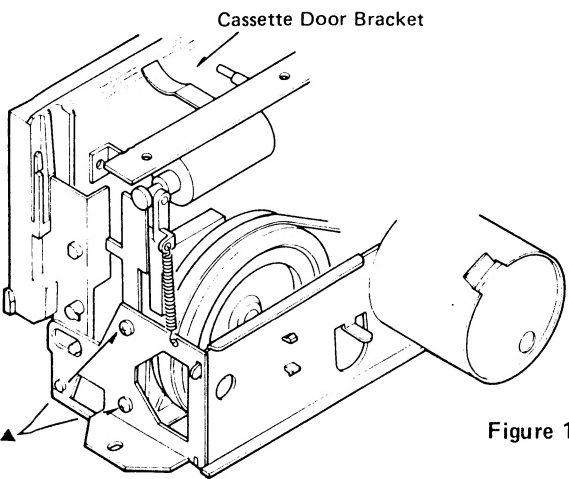


Figure 19

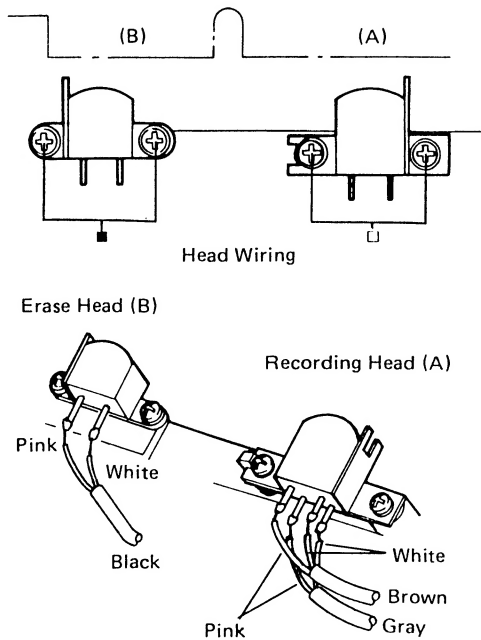


Figure 18

Replacement of Belt and Flywheel

- (1) Remove a screw marked "□" and the motor bracket, two belts and the flywheel can be removed as shown in Figure 20.
- (2) After replacement with a perfect belt and a flywheel, clean them with isopropyl alcohol and put them together in the opposite way to disassembly.
- (3) After finishing assembling, confirm tape speed and wow/flutter with test tape (MTT-111).

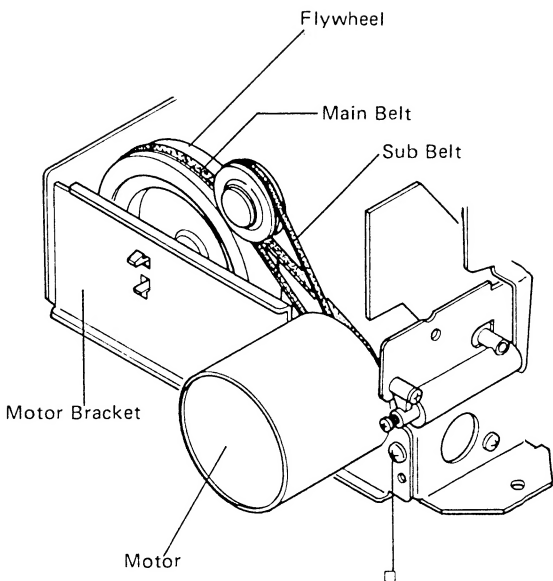


Figure 20

Replacement of Motor

- (1) Remove a screw marked "□" as shown in Figure 20 and two screws marked "★" and two wires (white, white/red) from motor side as shown in Figure 21, and the motor can be removed.
- (2) After replacement with a perfect motor, put it back in the opposite way to disassembly.
- (3) After finishing assembling, confirm tape speed and wow/flutter with test tape (MTT-111).

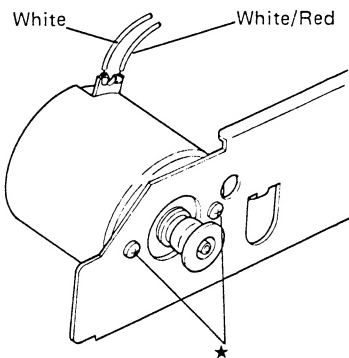


Figure 21

Replacement of Pinch Roller

- (1) Remove a washer to take off pinch roller assembly from the cassette deck as shown in Figure 22.
- (2) After replacement with a perfect pinch roller, clean it with isopropyl alcohol and put it back in the opposite way to disassembly.
- (3) After finishing assembling, confirm tape speed and wow/flutter with test tape (MTT-111).

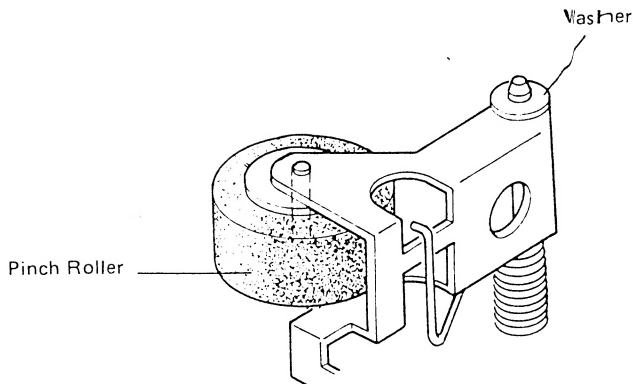


Figure 22

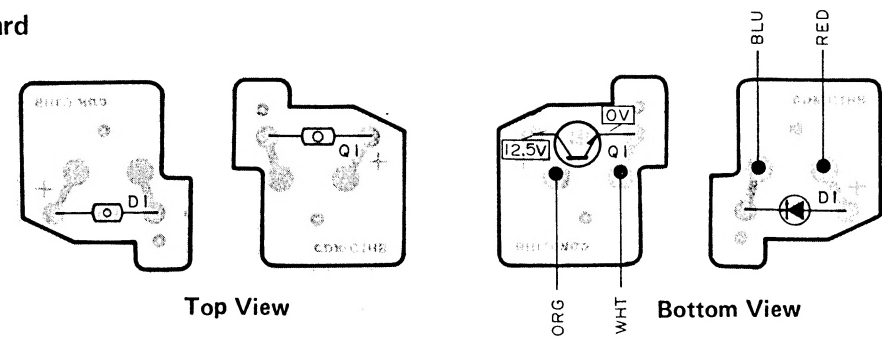
Trouble Shooting

| Symptom | Possible Cause | Remedies |
|------------------------------------|---|---|
| No power | 1. Defective power switch 2. Defective DC supply block 3. Defective power connections | 1. Replace switch. 2. Check and repair DC power. 3. Check and repair wiring. |
| No power to motor | 1. Defective motor 2. Defective Servo | 1. Replace motor. 2. Replace motor. |
| Distorted sound | 1. Record/Play head dirty 2. Defective cassette tape 3. Record/Play head magnetized 4. Record/Play head defective | 1. Clean head. 2. Replace tape. 3. Demagnetize head with head eraser. 4. Replace head. |
| High frequency deteriorated | 1. Record/Play head Azimuth improperly adjusted 2. Record/Play head dirty 3. Record/Play head magnetized 4. Excessive Wow/Flutter 5. Record/Play head defective 6. Cassette tape defective | 1. Readjust head azimuth. 2. Clean head. 3. Demagnetize head. 4. Follow the item under excessive Wow/Flutter. 5. Replace head. 6. Replace tape. |
| Excessive Wow/Flutter | 1. Flywheel assembly defective 2. Motor defective 3. Defective Servo 4. Drive belt defective 5. Pinch Roller assembly defective 6. Slippage between tape and pinch roller 7. Idler pulley defective 8. Tape counter defective 9. Improper take-up torque 10. Defective tape cassette | 1. Replace with better one. 2. Replace motor. 3. Replace motor. 4. Replace drive belt. 5. Replace with better one. 6. Clean pinch roller. 7. Replace idler pulley. 8. Replace tape counter. 9. Replace take-up mechanism clean oil and dirt from turntable and take-up roller. 10. Replace tape. |
| Signal-to-Noise Ratio Deteriorated | 1. Record/Play head magnetized 2. Record/Play head dirty 3. Record/Play head defective 4. Output amplifier defective 5. Cassette tape defective | 1. Demagnetize head. 2. Clean head. 3. Replace head. 4. Repair amplifier. 5. Replace tape. |
| Loss of channel separation | 1. Record/Play head defective | 1. Replace head. |
| Level variations | 1. Record/Play head dirty 2. Record/Play head defective 3. Record/Play head misadjusted 4. Cassette tape defective | 1. Clean head. 2. Replace head. 3. Readjust head. 4. Replace tape. |
| Improper tape travel | 1. Pinch roller misadjusted 2. Weak pinch roller pressure 3. Capstan defective (Binding is Bearing) 4. Pinch roller defective 5. Record/Play head misadjusted | 1. Reinstall pinch roller. 2. Replace pinch roller spring. 3. Clean bearing and Lubricate. 4. Replace pinch roller. 5. Readjust head. |

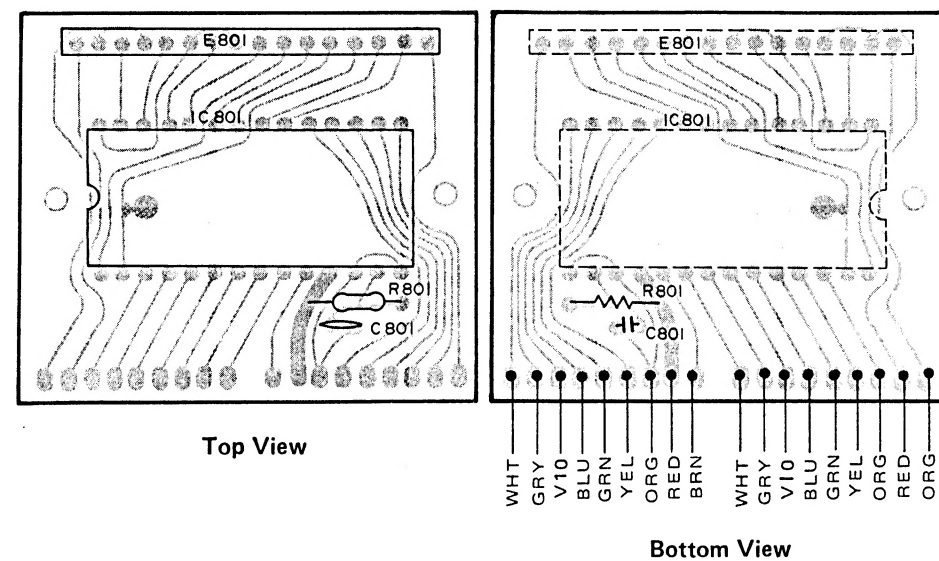
| Symptom | Possible Cause | Remedies |
|--------------------------|--|---|
| Tape speed too fast/slow | 1. Defective cassette tape 2. Defective motor 3. Defective servo | 1. Replace tape. 2. Replace motor. 3. Replace motor. |
| Tape does not move | 1. Defective cassette tape 2. Defective motor 3. Defective servo 4. Drive belt off 5. Reel hub defective 6. Pinch roller not contacting capstan 7. Defective power connections 8. Cassette loaded incorrectly 9. Drive belt out of place | 1. Replace tape. 2. Replace motor. 3. Replace motor. 4. Replace belt. 5. Replace reel. 6. Replace pinch roller spring. 7. Check and repair wiring. 8. Set the tape properly. 9. Reinstall belt. |
| Drive belt out of place | 1. Idler pulley misadjusted 2. Motor misadjusted 3. Drive belt defective 4. Excessive clearance between flywheel and flywheel spacer | 1. Reinstall idler pulley. 2. Reinstall motor. 3. Replace belt. 4. Replace flywheel spacer. |
| Does not record | 1. Record/Play head defective 2. Record/Play head dirty 3. Record amp defective 4. Defective record interlock switch 5. Cassette has safety tabs removed 6. Broken head wire 7. Bias oscillator defective 8. Input jack defective | 1. Replace head. 2. Clean head. 3. Repair amplifier. 4. Replace switch. 5. Fix tabs. 6. Check and repair wiring. 7. Check and repair. 8. Replace jack. |
| Does not playback | 1. Record/Play head dirty 2. Record/Play head defective 3. Defective playback amplifier 4. Defective output buffer amplifier 5. Defective tape output jack 6. Defective Dolby circuit 7. Wire between Record/Play head and playback amplifier broken 8. Improper tape travel 9. Defective preamp output jack | 1. Clean head 2. Replace head. 3. Repair amplifier. 4. Repair amplifier. 5. Replace jack. 6. Repair Dolby circuit. 7. Check wiring and repair amplifier. 8. Replace tape. 9. Replace jack |
| Does not erase | 1. Defective erase head 2. Erase head dirty 3. Bias oscillator defective 4. Broken wire on head | 1. Replace head. 2. Clean head. 3. Check and repair bias oscillator 4. Resolder wire. |

Parts Layout on P.C. Boards

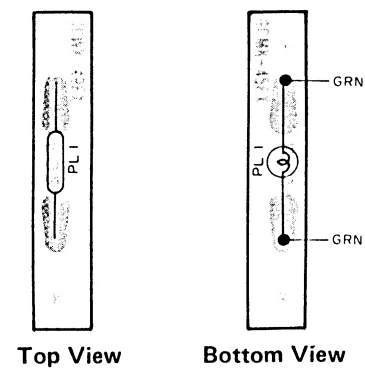
Sensor P.C. Board



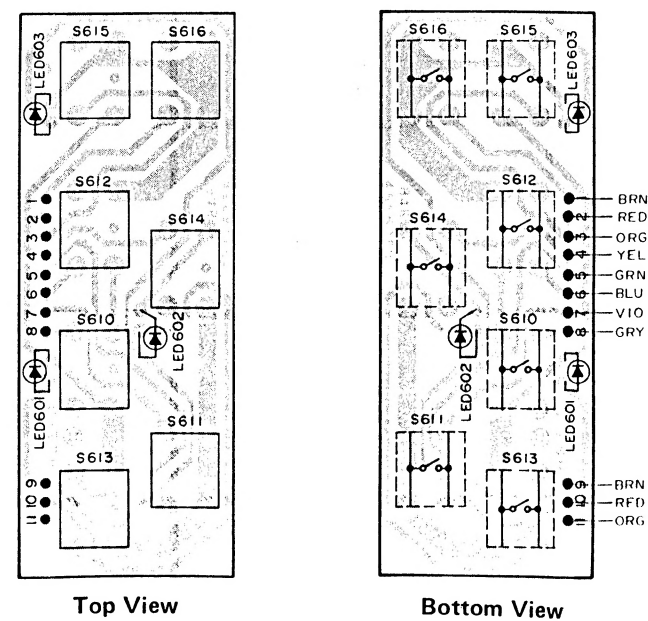
F.L. Counter P.C. Board



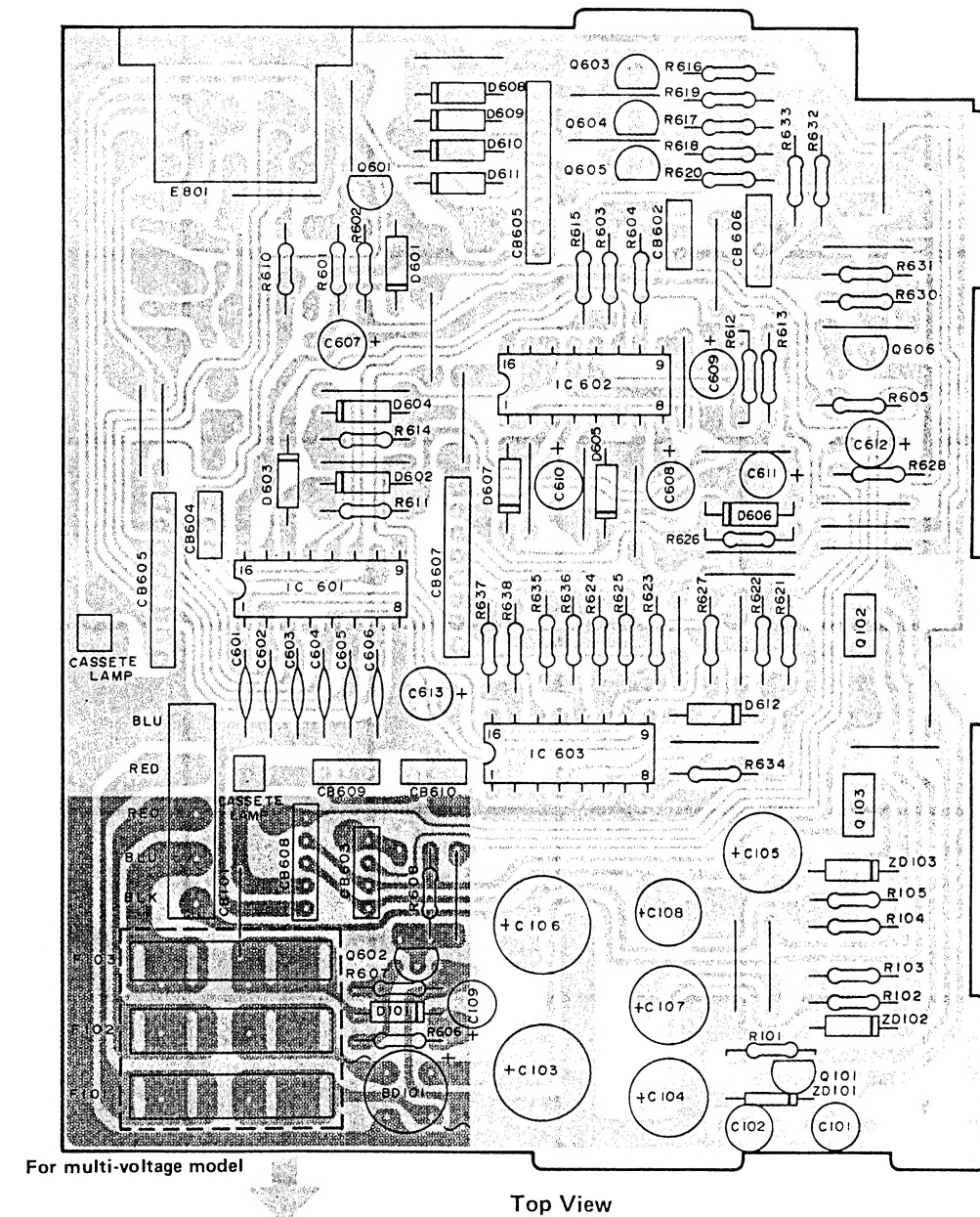
Lamp P.C. Board



Key Board P.C. Board



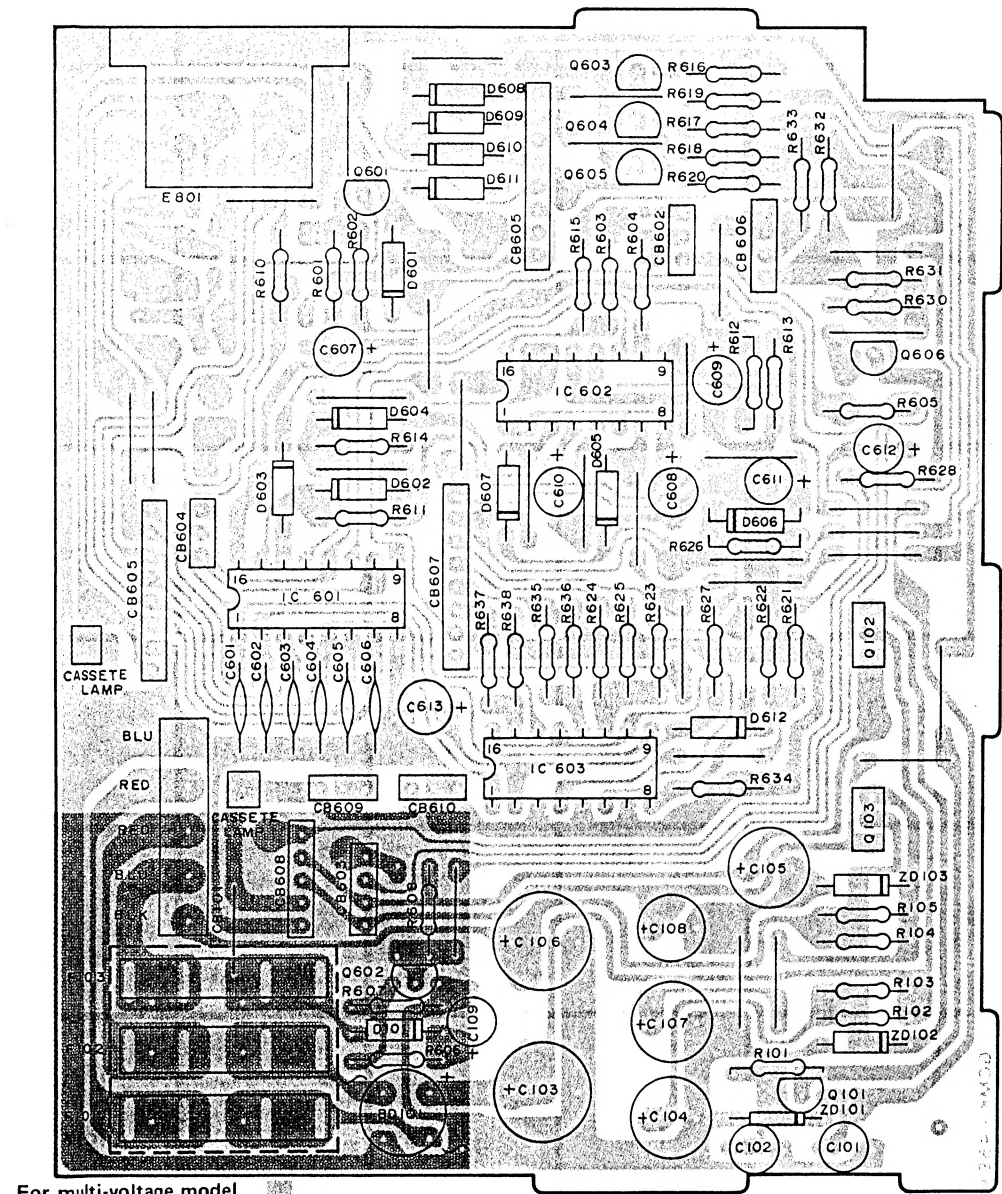
Power & Control P.C. Board



| | |
|----|--------|
| 1 | 5.3V |
| 2 | 5.3V |
| 3 | 5.3V |
| 4 | |
| 5 | 5.3V |
| 6 | 5.3V |
| 7 | 5.3V |
| 8 | OV |
| 9 | 5.3V |
| 10 | REC |
| | OTHER |
| 11 | PAUSE |
| | OTHER |
| 12 | PLAY |
| | OTHER |
| 13 | REW |
| | OTHER |
| 14 | FF,REW |
| | OTHER |
| 15 | FF |
| | OTHER |
| 16 | 5.3V |

| C6D3 | |
|------|------|
| 1 | 5.3v |
| 2 | 0v |
| 3 | 0v |
| 4 | 0v |
| 5 | |
| 6 | 0v |
| 7 | 0v |
| 8 | 0v |
| 9 | 5.3v |
| 10 | 0v |
| 11 | 0v |
| 12 | 0v |
| 13 | 0v |
| 14 | 5.3v |
| 15 | 0v |
| 16 | 0v |

Power & Control P.C. Board



IC601

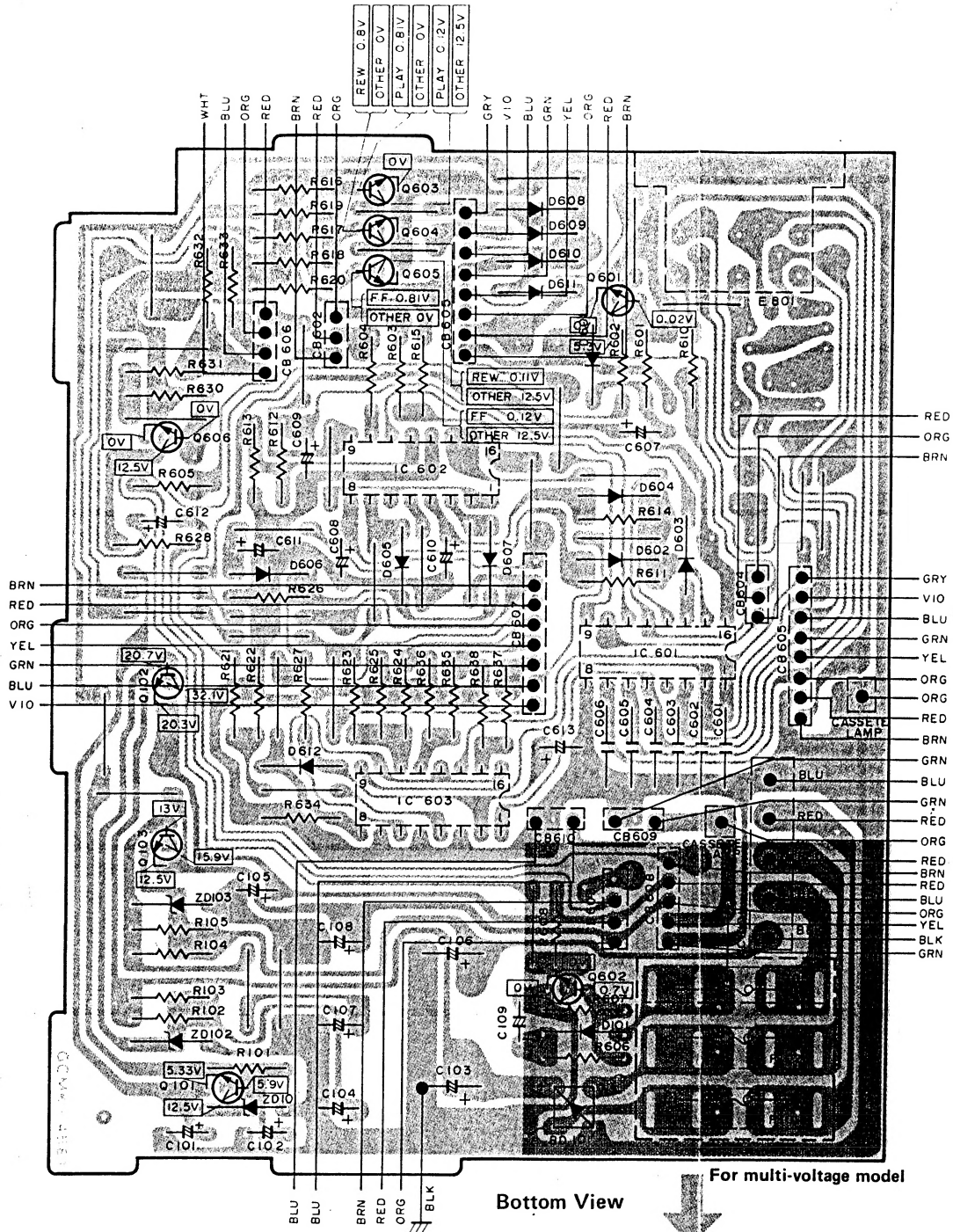
| | |
|----|------------|
| 1 | 5.3v |
| 2 | 5.3v |
| 3 | 5.3v |
| 4 | |
| 5 | 5.3v |
| 6 | 5.3v |
| 7 | 5.3v |
| 8 | 0v |
| 9 | 5.3v |
| 10 | REC 4.5v |
| | OTHER 0v |
| 11 | PAUSE 5.2v |
| | OTHER 0v |
| 12 | PLAY 4.9v |
| | OTHER 0v |
| 13 | REW 5.1v |
| | OTHER 0v |
| 14 | FF,REW 5v |
| | OTHER 0v |
| 15 | FF 5.3v |
| | OTHER 0v |
| 16 | 5.3v |

IC603

| | |
|----|------|
| 1 | 5.3v |
| 2 | 0v |
| 3 | 0v |
| 4 | 0v |
| 5 | |
| 6 | 0v |
| 7 | 0v |
| 8 | 0v |
| 9 | 5.3v |
| 10 | 0v |
| 11 | 0v |
| 12 | 0v |
| 13 | 0v |
| 14 | 5.3v |
| 15 | 0v |
| 16 | 0v |

IC602

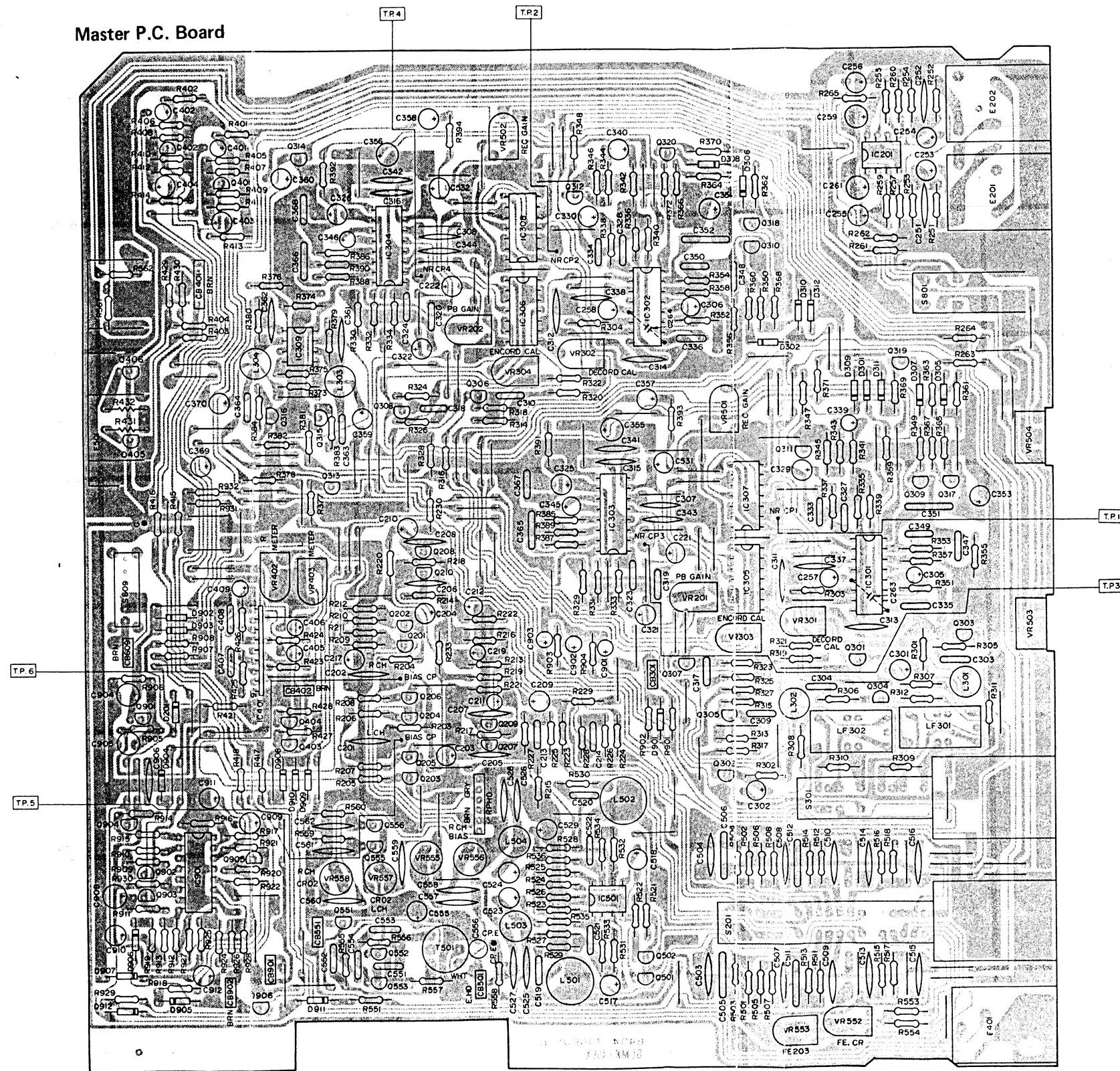
| | |
|----|-------------|
| 1 | 12.5v |
| 2 | 12.5v |
| 3 | |
| 4 | REW 4.8v |
| | OTHER 0v |
| 5 | |
| 6 | 12.5v |
| 7 | FF 4.3v |
| | OTHER 0v |
| 8 | FF 4.9v |
| | OTHER 0v |
| 9 | 12.5v |
| 10 | PAUSE 4.5v |
| | OTHER 0v |
| 11 | PAUSE 5.2v |
| | OTHER 0v |
| 12 | FF,REW 0.6v |
| | OTHER 0v |
| 13 | 0v |
| 14 | PLAY 4.9v |
| | OTHER 0v |
| 15 | PLAY 4.9v |
| | OTHER 0v |
| 16 | PLAY 4.2v |
| | OTHER 0v |



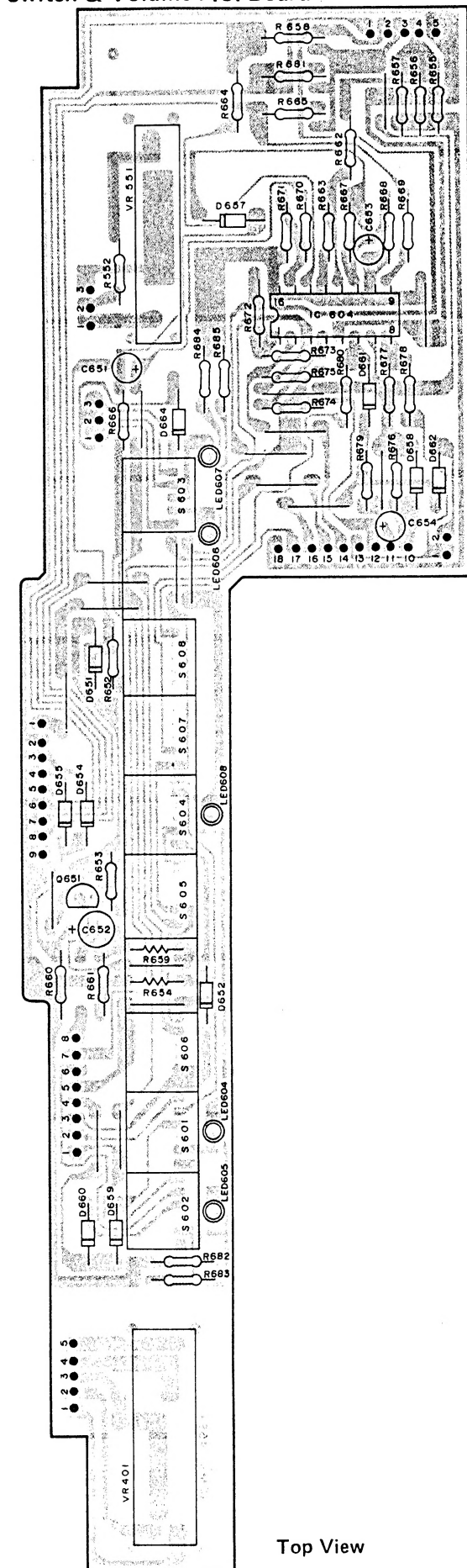
AL-60

AL-60

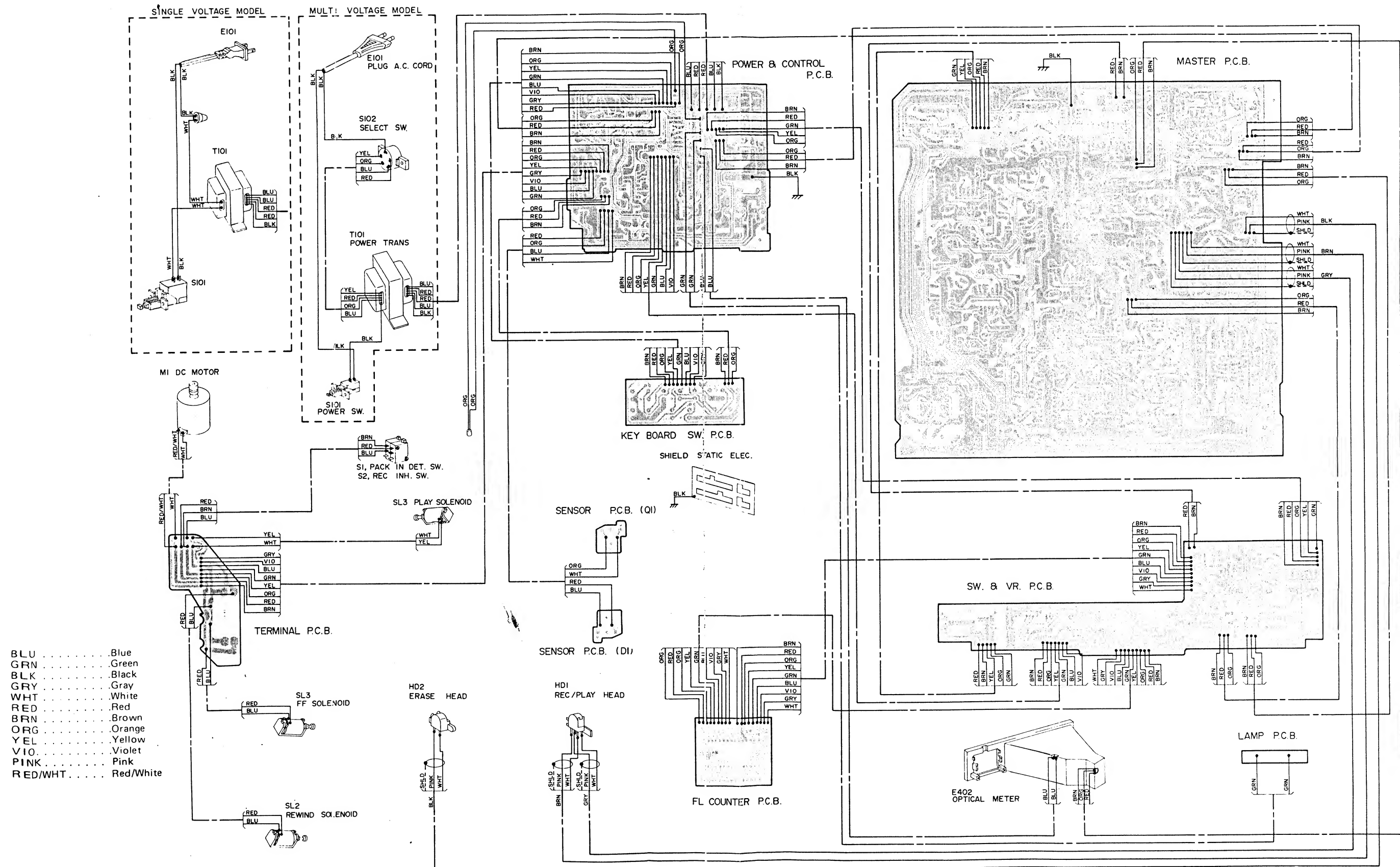
Master P.C. Board



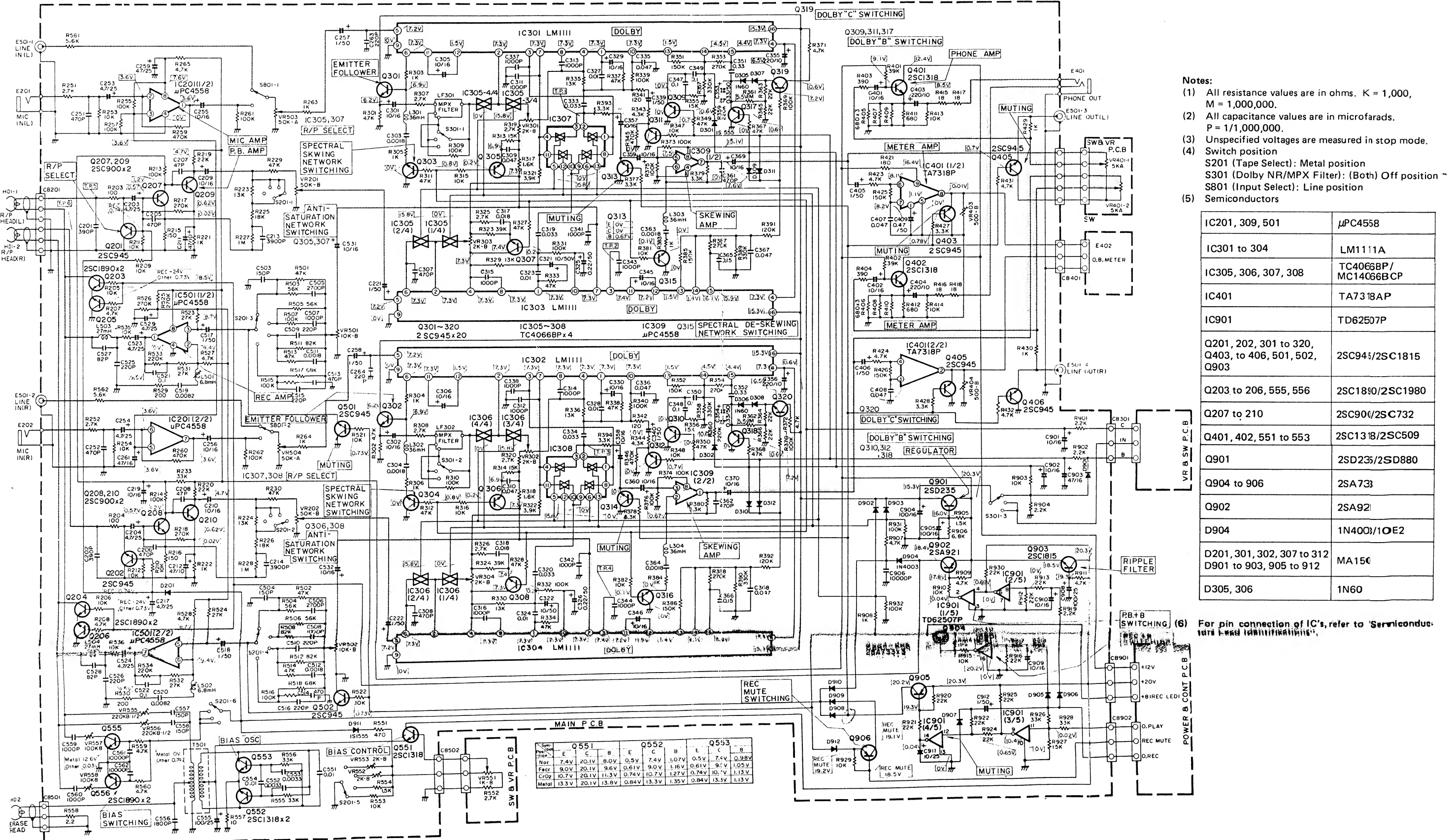
Switch & Volume P.C. Board



Wiring Diagram



Schematic Diagram (1/2)



Schematic Diagram (2/2)

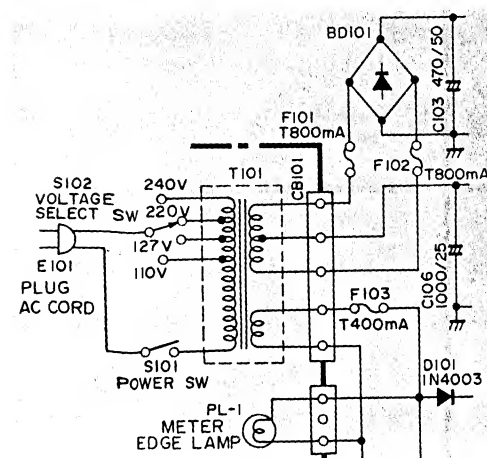
Notes:

- (1) All resistance values are in ohm, K = 1,000, M = 1,000,000.
- (2) All resistance values are in microfarads. P = 1/1,000,000.
- (3) Unspecified voltages are measured in stop mode.
- (4) Switch position
S601 (Auto Play): On position
S602 (Auto Rewind): On position
S603 (Dolby NR Select): Dolby-C position
S604 (Execution): On position
S605 (Clear): (Intact)
S606 (Tape/Time): Tape position
S607 (Call): (Intact)
S608 (Write): On position
- (5) Semiconductors

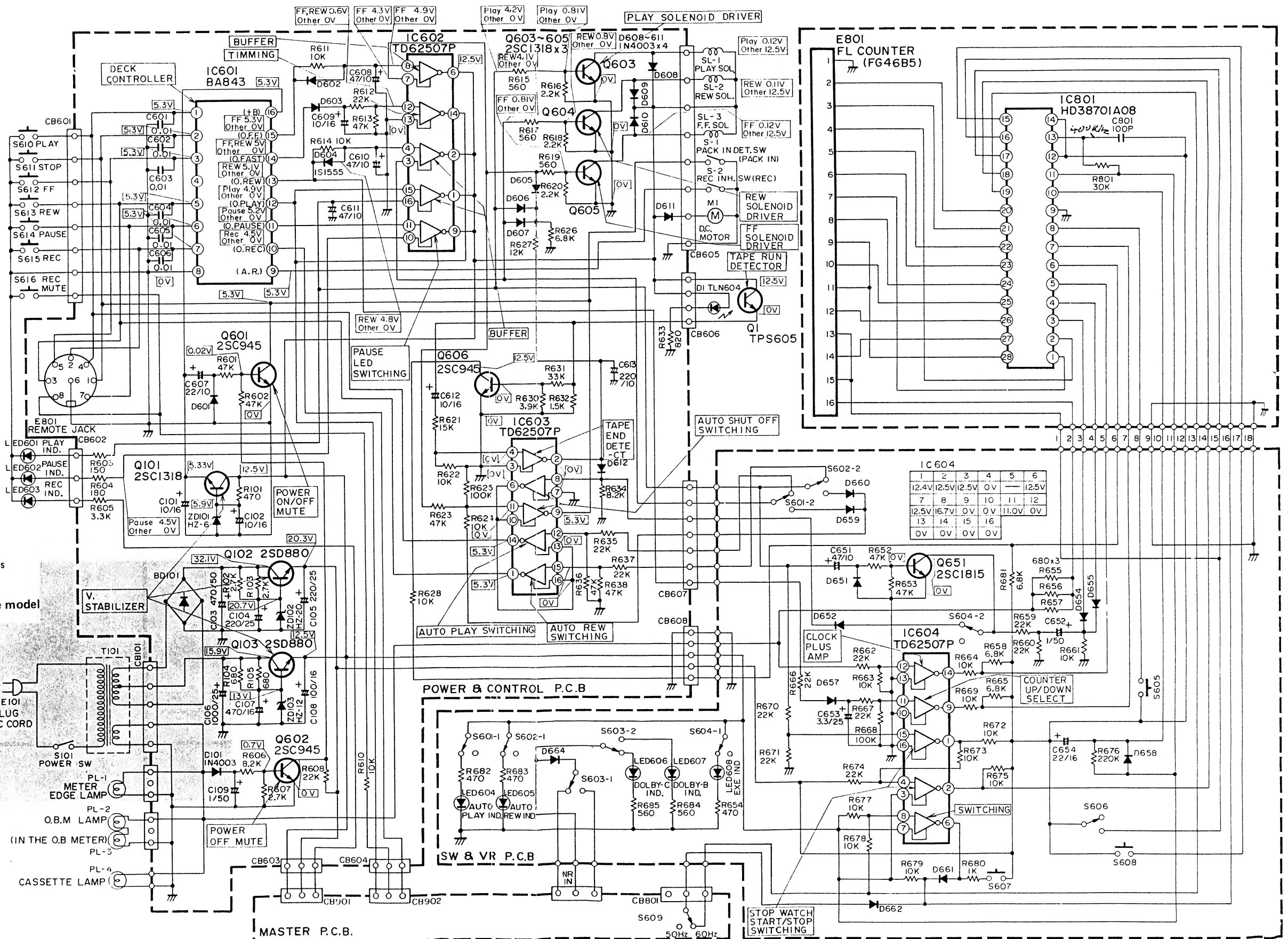
| | |
|---|------------------|
| IC601 | BA843 |
| IC602 to 604 | TD62507P |
| IC801 | HD38701A08 |
| Q1 | TPS605 |
| Q101, 603 to 605 | 2SC509/2SC1318 |
| Q102, 103 | 2SD880/2SD235 |
| Q601, 602, 606, 651 | 2SC1815, 2SC1684 |
| D1 | TLN604 |
| D101, 608 to 611 | 1N4003/10E2 |
| D601 to 607, 612 651, 652, 654, 655 654 to 662, 664 | 1S1555/MA165 |
| BD101 | WL02 |

- (6) For pin connection of IC, refer to "Semiconductors Lead Identifications".

For single-voltage model



For multi-voltage model



Electrical Parts List

Resistors (All resistors are carbon film, 1/4W, ±5% unless otherwise noted.)
 uF = microfarads, pF = picofarads

| Symbol No. | Part No. | Description | Symbol No. | Part No. | Description |
|--------------------------|-------------|-----------------------|------------|-------------|-------------|
| Master P.C. Board | | | | | |
| IC's | | | | | |
| IC201 | 51T43471U02 | μPC4558C | Q210 | 48S40149P01 | 2SC900E |
| IC301 | 51S47808F01 | Dolby LM1111A | or | 48S40246G01 | 2SC732BL |
| IC302 | 51S47808F01 | Dolby LM1111A | Q301 | 48T43525F02 | 2SC945L-P |
| IC303 | 51S47808F01 | Dolby LM1111A | or | 48S44578J01 | 2SC1815-Y |
| IC304 | 51S47808F01 | Dolby LM1111A | or | 48T43525F03 | 2SC1815-GR |
| IC305 | 51T47739F01 | TC4066BP | Q302 | 48T43525F02 | 2SC945L-P |
| or | 51T40941U01 | MC14066 BCP | or | 48S44578J01 | 2SC1815-Y |
| IC306 | 51T47739F01 | TC4066BP | or | 48T43525F03 | 2SC1815-GR |
| or | 51T40941U01 | MC14066BCP | Q304 | 48T43525F02 | 2SC945L-P |
| IC307 | 51T47739F01 | TC4066BP | or | 48S44578J01 | 2SC1815-Y |
| or | 51T40941U01 | MC14066BCP | or | 48T43525F03 | 2SC1815-GR |
| IC308 | 51T47739F01 | TC4066BP | Q305 | 48T43525F02 | 2SC945L-P |
| or | 51T40941U01 | MC14066BCP | or | 48S44578J01 | 2SC1815-Y |
| IC309 | 51T43471U02 | μPC4558C | or | 48T43525F03 | 2SC1815-GR |
| IC401 | 51T41803U01 | TA7318AP-2 | Q306 | 48T43525F02 | 2SC945L-P |
| IC501 | 51T43471U02 | μPC4558C | or | 48S44578J01 | 2SC1815-Y |
| IC901 | 51T47738F01 | TD62507P <i>F 13h</i> | or | 48T43525F03 | 2SC1815-GR |
| Transistors | | | Q307 | 48T43525F02 | 2SC945L-P |
| Q201 | 48T43525F02 | 2SC945L-P | or | 48S44578J01 | 2SC1815-Y |
| or | 48S44578J01 | 2SC1815-Y | or | 48T43525F03 | 2SC1815-GR |
| or | 48T43525F03 | 2SC1815-GR | Q308 | 48T43525F02 | 2SC945L-P |
| Q202 | 48T43525F02 | 2SC945L-P | or | 48S44578J01 | 2SC1815-Y |
| or | 48S44578J01 | 2SC1815-Y | or | 48T43525F03 | 2SC1815-GR |
| or | 48T43525F03 | 2SC1815-GR | Q309 | 48T43525F02 | 2SC945L-P |
| Q203 | 48T43394P01 | 2SC1890E-F | or | 48S44578J01 | 2SC1815-Y |
| or | 48T41196U03 | 2SC1980-T | or | 48T43525F03 | 2SC1815-GR |
| Q204 | 48T43394P01 | 2SC1890E-F | Q310 | 48T43525F02 | 2SC945L-P |
| or | 48T41196U03 | 2SC1980-T | or | 48S44578J01 | 2SC1815-Y |
| Q205 | 48T43394P01 | 2SC1890E-F | or | 48T43525F03 | 2SC1815-GR |
| or | 48T41196U03 | 2SC1980-T | Q311 | 48T43525F02 | 2SC945L-P |
| Q206 | 48T43394P01 | 2SC1890E-F | or | 48S44578J01 | 2SC1815-Y |
| or | 48T41196U03 | 2SC1980-T | or | 48T43525F03 | 2SC1815-GR |
| Q207 | 48S40149P01 | 2SC900E | Q312 | 48T43525F02 | 2SC945L-P |
| or | 48S40246G01 | 2SC732BL | or | 48S44578J01 | 2SC1815-Y |
| Q208 | 48S40149P01 | 2SC900E | or | 48T43525F03 | 2SC1815-GR |
| or | 48S40246G01 | 2SC732BL | Q313 | 48T43525F02 | 2SC945L-P |
| Q209 | 48S40149P01 | 2SC900E | or | 48S44578J01 | 2SC1815-Y |
| or | 48S40246G01 | 2SC732BL | or | 48T43525F03 | 2SC1815-GR |
| | | | Q314 | 48T43525F02 | 2SC945L-P |
| | | | or | 48S44578J01 | 2SC1815-Y |
| | | | or | 48T43525F03 | 2SC1815-GR |

| Symbol No. | Part No. | Description | Symbol No. | Part No. | Description |
|--|---|--|--|---|--|
| Q315 or or Q316 or or | 48T43525F02 48S44578J01 48T43525F03 48T43525F02 48S44578J01 48T43525F03 | 2SC945L-P 2SC1815-Y 2SC1815-GR 2SC945L-P 2SC1815-Y 2SC1815-GR | Q552 Q553 Q555 or Q556 or | 48T40832F03 48T40832F03 48T43394P01 48T41196U03 48T43394P01 48T41196U03 | 2SC1318NC-R 2SC1318NC-R 2SC1890E-F 2SC1980-T 2SC1890E-F 2SC1980-T |
| Q317 or or Q318 or or | 48T43525F02 48S44578J01 48T43525F03 48T43525F02 48S44578J01 48T43525F03 | 2SC945L-P 2SC1815-Y 2SC1815-GR 2SC945L-P 2SC1815-Y 2SC1815-GR | Q901 or Q902 or Q903 or or | 48S40662G05 48T42620F02 48T42941U01 48T42941U02 48T43525F02 48S44578J01 48T43525F03 | 2SD235-Y 2SD880-Y 2SA921S 2SA921T 2SC945L-P 2SC1815-Y 2SC1815-GR |
| Q319 or or Q320 or or | 48T43525F02 48S44578J01 48T43525F03 48T43525F02 48S44578J01 48T43525F03 | 2SC945L-P 2SC1815-Y 2SC1815-GR 2SC945L-P 2SC1815-Y 2SC1815-GR | Q904 Q905 Q906 | 48T40081T03 48T40081T03 48T40081T03 | 2SA733 (P) 2SA733 (P) 2SA733 (P) |
| Q401 or Q402 or Q403 or or | 48T40832F03 48S43239G02 48T40832F03 48S43239G02 48T43525F02 48S44578J01 48T43525F03 | 2SC1318NC-R 2SC509-Y 2SC1318NC-R 2SC509-Y 2SC1815-Y 2SC945L-P 2SC1815-GR | Diodes | | |
| Q404 or or Q405 or or | 48T43525F02 48S44578J01 48T43525F03 48T44578J01 48S43525F02 48T43525F03 | 2SC1815-Y 2SC945L-P 2SC1815-GR 2SC945L-P 2SC1815-Y 2SC1815-GR | D201 D301 D302 D305 D306 | 48T51582F01 48T51582F01 48T51582F01 48B41768G01 48B41768G01 | MA150 MA150 MA150 1N60 1N60 |
| Q406 or or Q501 or or | 48T44578J01 48S43525F02 48T43525F03 48T43525F02 48S44578J01 48T43525F03 | 2SC945L-P 2SC1815-Y 2SC1815-GR 2SC945L-P 2SC1815-Y 2SC1815-GR | D307 D308 D309 D310 D311 | 48T51582F01 48T51582F01 48T51582F01 48T51582F01 48T51582F01 | MA150 MA150 MA150 MA150 MA150 |
| Q406 or or Q501 or or | 48T44578J01 48S43525F02 48T43525F03 48T43525F02 48S44578J01 48T43525F03 | 2SC945L-P 2SC1815-Y 2SC1815-GR 2SC945L-P 2SC1815-Y 2SC1815-GR | D312 D901 D902 D903 D904 or | 48T51582F01 48T51582F01 48T51582F01 48T51582F01 48T40477U01 48C40235G02 | MA150 MA150 MA150 MA150 1N4003 10E2 |
| Q502 or or Q551 or | 48T43525F02 48S44578J01 48T43525F03 48T40832F03 48S43239G02 | 2SC945L-P 2SC1815-Y 2SC1815-GR 2SC1318NC-R 2SC509-Y | D905 D906 D907 D908 D909 | 48T51582F01 48T51582F01 48T51582F01 48T51582F01 48T51582F01 | MA150 MA150 MA150 MA150 MA150 |
| Q502 or or Q551 or | 48T43525F02 48S44578J01 48T43525F03 48T40832F03 48S43239G02 | 2SC945L-P 2SC1815-Y 2SC1815-GR 2SC1318NC-R 2SC509-Y | D910 D911 D912 | 48T51582F01 48T51582F01 48T51582F01 | MA150 MA150 MA150 |

| Symbol No. | Part No. | Description | Symbol No. | Part No. | Description |
|--------------------------------------|---|--|--|--|---|
| Switches | | | | | |
| S201 S301 S609 S801 | 40T47780F01 40T47781F01 40T41239F01 40T45538F01 | SRZ64S (Tape Select) SRZ43N (Dolby NR/MPX) Slide Select (50 Hz/60 Hz) SUF12 (Input Select) | C211 C212 C213 C214 *C217 | 23S40657F07 23S40657F07 8S40656F08 8S40656F08 23D44333G05 | Electrolytic 47 uF/10V Electrolytic 47 uF/10V Mylar 0.0039 uF Mylar 0.0039 uF Electrolytic 4.7 uF/25V |
| Filters & Transformer | | | | | |
| LF301 LF302 T501 | 51T42537U01 51T42537U01 25T50431F01 | Filter, MPX LP-V20 Filter, MPX LP-V20 Transformer, OSC | C219 C221 C222 C251 C252 | 23S40657F10 23S40657F28 23S40657F28 8S44505P45 8S44505P45 | Electrolytic 10 uF/16 Electrolytic 1 uF/50V Electrolytic 1 uF/50V Ceramic 470 pF Ceramic 470 pF |
| Jacks & Plate | | | | | |
| E201 E202 E401 E501 | 9T45549F05 9T45549F05 9T45549F12 9B44393P01 | Jack, Microphone 6.3 (Metal) Jack, Microphone 6.3 (Metal) Jack, Microphone 6.3 (Metal) Plate, Phono | C253 C254 C255 C256 C257 | 23S40657F16 23S40657F16 23S40657F10 23S40657F10 23S40657F28 | Electrolytic 4.7 uF/25V Electrolytic 4.7 uF/25V Electrolytic 10 uF/16V Electrolytic 10 uF/16V Electrolytic 1 uF/50V |
| Coils | | | | | |
| L301 L302 L303 L304 L501 | 24T47741F01 24T47741F01 24T47741F01 24T47741F01 24S41199U11 | Inductor, 36mH Inductor, 36mH Inductor, 36mH Inductor, 36mH Inductor, 6.8mH | C258 C259 C261 C263 C264 | 23S40657F28 23S40657F20 23S41198U27 8S40805F03 8S40805F03 | Electrolytic 1 uF/50V Electrolytic 47 uF/25V Electrolytic 47 uF/16V Ceramic 390 pF Ceramic 390 pF |
| L502 L503 L504 | 24S41199U11 24T44499P01 24T44499P01 | Inductor, 6.8mH Inductor, 27mH Inductor, 27mH | C301 C302 C303 C304 C305 | 23S40657F10 23S40657F10 8S40656F04 8S40656F04 23S40657F10 | Electrolytic 10 uF/16V Electrolytic 10 uF/16V Mylar 0.0018 uF Mylar 0.0018 uF Electrolytic 10 uF/16V |
| Capacitors | | | | | |
| C201 C202 C203 C204 C205 | 8S44505P44 8S44505P44 23S40657F16 23S40657F16 8S44505P45 | Ceramic 390 pF Ceramic 390 pF Electrolytic 4.7 uF/25V Electrolytic 4.7 uF/25V Ceramic 470 pF | C306 C307 C308 C309 C310 | 23S40657F10 8S44505P45 8S44505P45 8S40656F21 8S40656F21 | Electrolytic 10 uF/16V Ceramic 470 pF Ceramic 470 pF Mylar 0.047 uF Mylar 0.047 uF |
| C206 C207 C208 C209 C210 | 8S44505P45 8S44505P29 8S44505P29 23S40657F10 23S40657F10 | Ceramic 470 pF Ceramic 47 pF Ceramic 47 pF Electrolytic 10 uF/16V Electrolytic 10 uF/16V | C311 C312 C313 C314 C315 C316 | 8S44505P49 8S44505P49 8S44505P49 8S44505P49 8S44505P49 8S44505P49 | Ceramic 1000 pF Ceramic 1000 pF Ceramic 1000 pF Ceramic 1000 pF Ceramic 1000 pF Ceramic 1000 pF |
| C217 C218 C219 C220 C221 | 8S40656F16 8S40656F16 8S40656F19 8S40656F19 23S41198U12 | Mylar 0.018 uF Mylar 0.018 uF Mylar 0.033 uF Mylar 0.033 uF Electrolytic 10 uF/50V | C317 C318 C319 C320 C321 | 8S40656F16 8S40656F16 8S40656F19 8S40656F19 23S41198U12 | Mylar 0.018 uF Mylar 0.018 uF Mylar 0.033 uF Mylar 0.033 uF Electrolytic 10 uF/50V |
| C322 C323 C324 C325 C326 | 23S41198U12 8S40656F13 8S40656F13 23T42478F20 23T42478F20 | Electrolytic 10 uF/50V Mylar 0.01 uF Mylar 0.01 uF Electrolytic 0.22 uF/50V Electrolytic 0.22 uF/50V | | | |

* When replacing any part of C217, C909, C910, C911, R916, R917 in multi-voltage models which belong to manufacture's serial number 10610001 to 10611000, be sure to exchange all six parts for specified parts on the parts list. In this case, take off 4.7 uF and 10 uF capacitors which may be fixed on the pattern side of the master P.C. Board.

| Symbol No. | Part No. | Description |
|------------|-------------|--------------------------|
| C327 | 8S40656F13 | Mylar 0.01 uF |
| C328 | 8S40656F13 | Mylar 0.01 uF |
| C329 | 23S40657F10 | Electrolytic 10 uF/16V |
| C330 | 23S40657F10 | Electrolytic 10 uF/16V |
| C333 | 8S40656F19 | Mylar 0.033 uF |
| C334 | 8S40656F19 | Mylar 0.033 uF |
| C335 | 8S40656F21 | Mylar 0.047 uF |
| C336 | 8S40656F21 | Mylar 0.047 uF |
| C337 | 8S44505P49 | Ceramic 1000 pF |
| C338 | 8S44505P49 | Ceramic 1000 pF |
| C339 | 23S40657F28 | Electrolytic 1 uF/50V |
| C340 | 23S40657F28 | Electrolytic 1 uF/50V |
| C341 | 8S44505P49 | Ceramic 1000 pF |
| C342 | 8S44505P49 | Ceramic 1000 pF |
| C343 | 8S44505P49 | Ceramic 1000 pF |
| C344 | 8S44505P49 | Ceramic 1000 pF |
| C345 | 23S40657F10 | Electrolytic 10 uF/16V |
| C346 | 23S40657F10 | Electrolytic 10 uF/16V |
| C347 | 8S41442F25 | Mylar 0.1 uF |
| C348 | 8S44503P25 | Mylar 0.1 uF |
| C349 | 8S41442F25 | Mylar 0.1 uF |
| C350 | 8S41442F25 | Mylar 0.1 uF |
| C351 | 8S44503P31 | Mylar 0.33 uF |
| C352 | 8S44503P31 | Mylar 0.33 uF |
| C353 | 23T42478F21 | Electrolytic 0.33 uF/50V |
| C354 | 23T42478F21 | Electrolytic 0.33 uF/50V |
| C355 | 23S40657F09 | Electrolytic 220 uF/10V |
| C356 | 23S40657F09 | Electrolytic 220 uF/10V |
| C357 | 23S40657F10 | Electrolytic 10 uF/16V |
| C358 | 23S40657F10 | Electrolytic 10 uF/16V |
| C359 | 23S40657F10 | Electrolytic 10 uF/16V |
| C360 | 23S40657F10 | Electrolytic 10 uF/16V |
| C361 | 8S44505P45 | Ceramic 470 pF |
| C362 | 8S44505P45 | Ceramic 470 pF |
| C363 | 8S40656F04 | Mylar 0.0018 uF |
| C364 | 8S40656F04 | Mylar 0.0018 uF |
| C365 | 8S44503P27 | Mylar 0.15 uF |
| C366 | 8S44503P27 | Mylar 0.15 uF |
| C367 | 8S40656F21 | Mylar 0.047 uF |
| C368 | 8S40656F21 | Mylar 0.047 uF |
| C369 | 23S40657F10 | Electrolytic 10 uF/16V |
| C370 | 23S40657F10 | Electrolytic 10 uF/16V |
| C401 | 23S40657F10 | Electrolytic 10 uF/16V |
| C402 | 23S40657F10 | Electrolytic 10 uF/16V |
| C403 | 23S40657F09 | Electrolytic 220 uF/10V |

| Symbol No. | Part No. | Description |
|------------|-------------|--------------------------|
| C404 | 23S40657F09 | Electrolytic 220 uF/10V |
| C405 | 23S40657F28 | Electrolytic 1 uF/50V |
| C406 | 23S40657F28 | Electrolytic 1 uF/50V |
| C407 | 8S44503P21 | Mylar 0.047 uF |
| C408 | 8S40656F21 | Mylar 0.047 uF |
| C409 | 23S40657F27 | Electrolytic 0.47 uF/50V |
| C503 | 8S44505P39 | Ceramic 150 pF |
| C504 | 8S44505P39 | Ceramic 150 pF |
| C505 | 8S40656F06 | Mylar 0.0027 uF |
| C506 | 8S40656F06 | Mylar 0.0027 uF |
| C507 | 8S44505P49 | Ceramic 1000 pF |
| C508 | 8S44505P49 | Ceramic 1000 pF |
| C509 | 8S44505P41 | Ceramic 220 pF |
| C510 | 8S44505P41 | Ceramic 220 pF |
| C511 | 8S40656F04 | Mylar 0.0018 uF |
| C512 | 8S40656F04 | Mylar 0.0018 uF |
| C513 | 8S44505P45 | Ceramic 470 pF |
| C514 | 8S44505P45 | Ceramic 470 pF |
| C515 | 8S44505P41 | Ceramic 220 pF |
| C516 | 8S44505P41 | Ceramic 220 pF |
| C517 | 23S40657F28 | Electrolytic 1 uF/50V |
| C518 | 23S40657F28 | Electrolytic 1 uF/50V |
| C519 | 8S40656F12 | Mylar 0.0082 uF |
| C520 | 8S40656F12 | Mylar 0.0082 uF |
| C521 | 8S41442F25 | Mylar 0.1 uF |
| C522 | 8S41442F25 | Mylar 0.1 uF |
| C523 | 23S40657F16 | Electrolytic 4.7 uF/25V |
| C524 | 23S40657F16 | Electrolytic 4.7 uF/25V |
| C525 | 8S44505P41 | Ceramic 220 pF |
| C526 | 8S44505P41 | Ceramic 220 pF |
| C527 | 8S44505P35 | Ceramic 82 pF |
| C528 | 8S44505P35 | Ceramic 82 pF |
| C529 | 23S40657F16 | Electrolytic 4.7 uF/25V |
| C531 | 23S40657F10 | Electrolytic 10 uF/16V |
| C532 | 23S40657F10 | Electrolytic 10 uF/16V |
| C551 | 8S40656F13 | Mylar 0.01 uF |
| C552 | 8S40656F07 | Mylar 0.0033 uF |
| C553 | 8S40656F07 | Mylar 0.0033 uF |
| C554 | 8S40656F13 | Mylar 0.01 uF |
| C555 | 23S41198U35 | Electrolytic 100 uF/25V |
| C556 | 8T44481F19 | Polystyrol 0.0018 uF |
| C557 | 8S44505P39 | Ceramic 150 pF |
| C558 | 8S44505P39 | Ceramic 150 pF |
| C559 | 8S44505P49 | Ceramic 1000 pF |
| C560 | 8S44505P49 | Ceramic 1000 pF |

| Symbol No. | Part No. | Description |
|------------|-------------|-------------------------|
| C561 | 8S44505P61 | Ceramic 10000 pF |
| C562 | 8S44505P61 | Ceramic 10000 pF |
| C901 | 23S40657F10 | Electrolytic 10 uF/16V |
| C902 | 23S40657F10 | Electrolytic 10 uF/16V |
| C903 | 23S41198U27 | Electrolytic 47 uF/16V |
| C904 | 23S40657F14 | Electrolytic 100 uF/16V |
| C905 | 23S40657F14 | Electrolytic 100 uF/16V |
| C906 | 8S44505P61 | Ceramic 10000 pF |
| C908 | 23S40657F21 | Electrolytic 100 uF/25V |
| C909 | 23D44333G08 | Electrolytic 10 uF/16V |
| C910 | 23D44333G08 | Electrolytic 10 uF/16V |
| C911 | 23D44333G09 | Electrolytic 10 uF/25V |
| C912 | 23S40657F28 | Electrolytic 1 uF/50V |
| Resistors | | |
| R203 | 6S44593P41 | 100 ohm |
| R204 | 6S44593P41 | 100 ohm |
| R205 | 6S44593P89 | 10K ohm |
| R206 | 6S44593P89 | 10K ohm |
| R207 | 6S44593P81 | 4.7K ohm |
| R208 | 6S44593P81 | 4.7K ohm |
| R209 | 6S44593P89 | 10K ohm |
| R210 | 6S44593P89 | 10K ohm |
| R211 | 6S44593P89 | 10K ohm |
| R212 | 6S44593P89 | 10K ohm |
| R213 | 6S44594P14 | 100K ohm |
| R214 | 6S44594P14 | 100K ohm |
| R215 | 6S44593P45 | 150 ohm |
| R216 | 6S44593P45 | 150 ohm |
| R217 | 6S44594P24 | 270K ohm |
| R218 | 6S44594P24 | 270K ohm |
| R219 | 6S44593P97 | 22K ohm |
| R220 | 6S44593P97 | 22K ohm |
| R221 | 6S44593P65 | 1K ohm |
| R222 | 6S44593P65 | 1K ohm |
| R223 | 6S44593P92 | 13K ohm |
| R224 | 6S44593P92 | 13K ohm |
| R225 | 6S44593P95 | 18K ohm |
| R226 | 6S44593P95 | 18K ohm |
| R227 | 6S44594P36 | 820K ohm |
| R228 | 6S44594P36 | 820K ohm |
| R229 | 6S44594P06 | 47K ohm |
| R230 | 6S44594P06 | 47K ohm |
| R233 | 6S44594P02 | 33K ohm |
| R251 | 6S44593P75 | 2.7K ohm |

| Symbol No. | Part No. | Description |
|------------|------------|-------------|
| R252 | 6S44593P75 | 2.7K ohm |
| R255 | 6S44594P14 | 100K ohm |
| R257 | 6S44594P14 | 100K ohm |
| R259 | 6S44594P30 | 470K ohm |
| R260 | 6S44594P30 | 470K ohm |
| R261 | 6S44594P14 | 100K ohm |
| R262 | 6S44594P14 | 100K ohm |
| R263 | 6S44593P65 | 1K ohm |
| R264 | 6S44593P65 | 1K ohm |
| R265 | 6S44593P81 | 4.7K ohm |
| R301 | 6S44593P81 | 4.7K ohm |
| R302 | 6S44593P81 | 4.7K ohm |
| R303 | 6S44593P65 | 1K ohm |
| R304 | 6S44593P65 | 1K ohm |
| R305 | 6S44593P65 | 1K ohm |
| R306 | 6S44593P65 | 1K ohm |
| R307 | 6S44593P75 | 2.7K ohm |
| R308 | 6S44593P75 | 2.7K ohm |
| R309 | 6S44594P14 | 100K ohm |
| R310 | 6S44594P14 | 100K ohm |
| R311 | 6S44594P06 | 47K ohm |
| R312 | 6S44594P06 | 47K ohm |
| R313 | 6S44593P93 | 15K ohm |
| R314 | 6S44593P93 | 15K ohm |
| R315 | 6S44593P89 | 10K ohm |
| R316 | 6S44593P89 | 10K ohm |
| R317 | 6S44593P70 | 1.6K ohm |
| R318 | 6S44593P70 | 1.6K ohm |
| R319 | 6S44593P75 | 2.7K ohm |
| R320 | 6S44593P75 | 2.7K ohm |
| R321 | 6S44593P79 | 3.9K ohm |
| R322 | 6S44593P75 | 3.9K ohm |
| R323 | 6S44594P04 | 39K ohm |
| R324 | 6S44594P04 | 39K ohm |
| R325 | 6S44593P75 | 2.7K ohm |
| R326 | 6S44593P75 | 2.7K ohm |
| R327 | 6S44594P06 | 47K ohm |
| R328 | 6S44594P06 | 47K ohm |
| R329 | 6S44593P92 | 13K ohm |
| R330 | 6S44593P92 | 13K ohm |
| R331 | 6S44594P14 | 100K ohm |
| R332 | 6S44594P14 | 100K ohm |
| R333 | 6S44594P06 | 47K ohm |
| R334 | 6S44594P06 | 47K ohm |
| R335 | 6S44593P92 | 13K ohm |

* When replacing any part of C217, C909, C910, C911, R916, R917 in multi-voltage models which belong to manufacture's serial number 10610001 to 10611000, be sure to exchange all six parts for specified parts on the parts list. In this case, take off 4.7 μ F and 10 μ F capacitors which may be fixed on the pattern side of the master P.C. Board.

| Symbol No. | Part No. | Description |
|------------|------------|-------------|
| R336 | 6S44593P92 | 13K ohm |
| R337 | 6S44594P06 | 47K ohm |
| R338 | 6S44594P06 | 47K ohm |
| R339 | 6S44594P14 | 100K ohm |
| R340 | 6S44594P14 | 100K ohm |
| R341 | 6S44594P43 | 120 ohm |
| R342 | 6S44593P43 | 120 ohm |
| R343 | 6S44593P80 | 4.3K ohm |
| R344 | 6S44593P80 | 4.3K ohm |
| R345 | 6S44594P30 | 470K ohm |
| R346 | 6S44594P30 | 470K ohm |
| R347 | 6S44593P89 | 10K ohm |
| R348 | 6S44593P89 | 10K ohm |
| R349 | 6S44594P06 | 47K ohm |
| R350 | 6S44594P06 | 47K ohm |
| R351 | 6S44594P18 | 150K ohm |
| R352 | 6S44594P18 | 150K ohm |
| R353 | 6S44594P24 | 270K ohm |
| R354 | 6S44594P24 | 270K ohm |
| R355 | 6S44593P93 | 15K ohm |
| R356 | 6S44593P93 | 15K ohm |
| R357 | 6S44594P26 | 330K ohm |
| R358 | 6S44594P26 | 330K ohm |
| R359 | 6S44594P22 | 220K ohm |
| R360 | 6S44594P22 | 220K ohm |
| R361 | 6S44594P38 | 1M ohm |
| R362 | 6S44594P38 | 1M ohm |
| R363 | 6S44593P97 | 22K ohm |
| R364 | 6S44593P97 | 22K ohm |
| R365 | 6S44593P97 | 22K ohm |
| R366 | 6S44593P97 | 22K ohm |
| R367 | 6S44594P06 | 47K ohm |
| R368 | 6S44594P06 | 47K ohm |
| R369 | 6S44594P14 | 100K ohm |
| R370 | 6S44594P14 | 100K ohm |
| R371 | 6S44593P81 | 4.7K ohm |
| R372 | 6S44593P81 | 4.7K ohm |
| R373 | 6S44594P14 | 100K ohm |
| R374 | 6S44594P14 | 100K ohm |
| R375 | 6S44594P14 | 100K ohm |
| R376 | 6S44594P14 | 100K ohm |
| R377 | 6S44593P77 | 3.3K ohm |
| R378 | 6S44593P77 | 3.3K ohm |
| R379 | 6S44593P77 | 3.3K ohm |
| R380 | 6S44593P77 | 3.3K ohm |

| Symbol No. | Part No. | Description |
|------------|------------|-------------|
| R381 | 6S44593P89 | 10K ohm |
| R382 | 6S44593P89 | 10K ohm |
| R383 | 6S44593P65 | 1K ohm |
| R384 | 6S44593P65 | 1K ohm |
| R385 | 6S44594P18 | 150K ohm |
| R386 | 6S44594P18 | 150K ohm |
| R387 | 6S44594P24 | 270K ohm |
| R388 | 6S44594P24 | 270K ohm |
| R389 | 6S44594P26 | 330K ohm |
| R390 | 6S44594P26 | 330K ohm |
| R391 | 6S44594P16 | 120K ohm |
| R392 | 6S44594P16 | 120K ohm |
| R393 | 6S44593P77 | 3.3K ohm |
| R394 | 6S44593P77 | 3.3K ohm |
| R401 | 6S44594P04 | 39K ohm |
| R402 | 6S44594P04 | 39K ohm |
| R403 | 6S44593P55 | 390 ohm |
| R404 | 6S44593P55 | 390 ohm |
| R405 | 6S44593P61 | 680 ohm |
| R406 | 6S44593P61 | 680 ohm |
| R407 | 6S44593P61 | 680 ohm |
| R408 | 6S44593P61 | 680 ohm |
| R409 | 6S44593P61 | 680 ohm |
| R410 | 6S44593P61 | 680 ohm |
| R411 | 6S44593P61 | 680 ohm |
| R412 | 6S44593P61 | 680 ohm |
| R413 | 6S44593P89 | 10K ohm |
| R414 | 6S44593P89 | 10K ohm |
| R415 | 6S44593P23 | 18 ohm |
| R416 | 6S44593P23 | 18 ohm |
| R417 | 6S44593P23 | 18 ohm |
| R418 | 6S44593P23 | 18 ohm |
| R421 | 6S44593P47 | 180 ohm |
| R423 | 6S44593P81 | 4.7K ohm |
| R424 | 6S44593P81 | 4.7K ohm |
| R425 | 6S44594P18 | 150K ohm |
| R426 | 6S44594P18 | 150K ohm |
| R427 | 6S44593P77 | 3.3K ohm |
| R428 | 6S44593P77 | 3.3K ohm |
| R429 | 6S44593P65 | 1K ohm |
| R430 | 6S44593P65 | 1K ohm |
| R431 | 6S44593P81 | 4.7K ohm |
| R432 | 6S44593P81 | 4.7K ohm |
| R501 | 6S44594P06 | 47K ohm |
| R502 | 6S44594P06 | 47K ohm |

| Symbol No. | Part No. | Description |
|------------|------------|-------------|
| R503 | 6S44594P08 | 56K ohm |
| R504 | 6S44594P08 | 56K ohm |
| R505 | 6S44594P08 | 56K ohm |
| R506 | 6S44594P08 | 56K ohm |
| R507 | 6S44594P14 | 100K ohm |
| R508 | 6S44594P14 | 100K ohm |
| R511 | 6S44594P12 | 82K ohm |
| R512 | 6S44594P12 | 82K ohm |
| R513 | 6S44594P06 | 47K ohm |
| R514 | 6S44594P06 | 47K ohm |
| R515 | 6S44594P14 | 100K ohm |
| R516 | 6S44594P14 | 100K ohm |
| R517 | 6S44594P10 | 68K ohm |
| R518 | 6S44594P10 | 68K ohm |
| R521 | 6S44593P89 | 10K ohm |
| R522 | 6S44593P89 | 10K ohm |
| R523 | 6S44593P99 | 27K ohm |
| R524 | 6S44593P99 | 27K ohm |
| R525 | 6S44594P24 | 270K ohm |
| R526 | 6S44594P24 | 270K ohm |
| R527 | 6S44593P81 | 4.7K ohm |
| R528 | 6S44593P81 | 4.7K ohm |
| R529 | 6S44593P48 | 200 ohm |
| R530 | 6S44593P48 | 200 ohm |
| R531 | 6S44593P99 | 27K ohm |
| R532 | 6S44593P99 | 27K ohm |
| R533 | 6S44594P22 | 220K ohm |
| R534 | 6S44594P22 | 220K ohm |
| R535 | 6S44593P89 | 10K ohm |
| R536 | 6S44593P89 | 10K ohm |
| R551 | 6S44593P57 | 470 ohm |
| R553 | 6S44593P89 | 10K ohm |
| R554 | 6S44593P69 | 1.5K ohm |
| R555 | 6S44594P02 | 33K ohm |
| R556 | 6S44594P02 | 33K ohm |
| R557 | 6S44593P17 | 10 ohm |
| R558 | 6S44593P01 | 2.2 ohm |
| R559 | 6S44593P81 | 4.7K ohm |
| R560 | 6S44593P81 | 4.7K ohm |
| R561 | 6S44593P83 | 5.6K ohm |
| R562 | 6S44593P83 | 5.6K ohm |
| R901 | 6S44593P73 | 2.2K ohm |
| R902 | 6S44593P73 | 2.2K ohm |
| R903 | 6S44593P89 | 10K ohm |
| R904 | 6S44593P73 | 2.2K ohm |

| Symbol No. | Part No. | Description |
|------------|-------------|----------------------------------|
| R905 | 6S44593P69 | 1.5K ohm |
| R906 | 6S44593P85 | 6.8K ohm |
| R907 | 6S44593P81 | 4.7K ohm |
| R908 | 6S44593P65 | 1K ohm |
| R909 | 6S44593P81 | 4.7K ohm |
| R910 | 6S44593P89 | 10K ohm |
| R911 | 6S44593P81 | 4.7K ohm |
| R912 | 6S44593P97 | 22K ohm |
| R913 | 6S44593P97 | 22K ohm |
| R914 | 6S44593P89 | 10K ohm |
| R915 | 6S44593P89 | 10K ohm |
| *R916 | 6S40150T97 | 22K ohm |
| *R917 | 6S40150T97 | 22K ohm |
| R918 | 6S44593P87 | 8.2K ohm |
| R919 | 6S44593P73 | 2.2K ohm |
| R920 | 6S44593P97 | 22K ohm |
| R921 | 6S44593P97 | 22K ohm |
| R922 | 6S44593P97 | 22K ohm |
| R924 | 6S44593P97 | 22K ohm |
| R925 | 6S44593P97 | 22K ohm |
| R926 | 6S44594P02 | 33K ohm |
| R927 | 6S44593P93 | 15K ohm |
| R928 | 6S44594P02 | 33K ohm |
| R929 | 6S44593P89 | 10K ohm |
| R930 | 6S44593P97 | 22K ohm |
| R931 | 6S44594P14 | 100K ohm |
| R932 | 6S44594P14 | 100K ohm |
| VR201 | 18C42061J15 | Variable 50K ohm |
| VR202 | 18C42061J15 | Variable 50K ohm |
| VR301 | 18C42061J12 | Variable 2K ohm |
| VR302 | 18C42061J12 | Variable 2K ohm |
| VR303 | 18C42061J12 | Variable 2K ohm |
| VR304 | 18C42061J12 | Variable 2K ohm |
| VR403 | 18C42061J23 | Volume, Solid |
| VR404 | 18C42061J23 | Volume, Solid |
| VR501 | 18C42061J14 | Variable 10K ohm |
| VR502 | 18C42061J14 | Variable 10K ohm |
| VR552 | 18C42061J12 | Variable 2K ohm |
| VR553 | 18C42061J12 | Variable 2K ohm |
| VR555 | 18T43406P01 | Resistor, Variable 220K ohm-B ½W |
| VR556 | 18T43406P01 | Resistor, Variable 220K ohm-B ½W |
| VR557 | 18C41732G04 | Solid 100K ohm |
| VR558 | 18C41732G04 | Solid 100K ohm |

* When replacing any part of C217, C909, C910, C911, R916, R917 in multi-voltage models which belong to manufacture's serial number 10610001 to 10611000, be sure to exchange all six parts for specified parts on the parts list. In this case, take off 4.7 μF and 10 μF capacitors which may be fixed on the pattern side of the master P.C. Board.

| Symbol No. | Part No. | Description |
|---------------------------|-------------|-------------|
| Power & Control P.C.Board | | |
| IC's | | |
| IC 601 | 51T47110F01 | BA843 |
| IC 602 | 51T47738F01 | TD62507P |
| IC 603 | 51T47738F01 | TD62507P |
| Transistors | | |
| Q101 | 48T40832F03 | 2SC1318NC-R |
| or | 48S43239G02 | 2SC509-Y |
| Q102 | 48T42620F02 | 2SD880-Y |
| or | 48S40662G05 | 2SD235-Y |
| Q103 | 48T42620F02 | 2SD880-Y |
| or | 48S40662G05 | 2SD235-Y |
| Q601 | 48S44578J01 | 2SC945L-P |
| or | 48S43525F02 | 2SC1815-Y |
| or | 48S43525F03 | 2SC1815-GR |
| Q602 | 48S44578J01 | 2SC945L-P |
| or | 48S43525F02 | 2SC1815-Y |
| or | 48S43525F03 | 2SC1815-GR |
| Q603 | 48T40832F03 | 2SC1318NC-R |
| or | 48S43239G02 | 2SC509-Y |
| Q604 | 48T40832F03 | 2SC1318NC-R |
| or | 48S43239G02 | 2SC509-Y |
| Q605 | 48T40832F03 | 2SC1318NC-R |
| or | 48S43239G02 | 2SC509-Y |
| Q606 | 48S44578J01 | 2SC945L-P |
| or | 48S43525F02 | 2SC1815-Y |
| or | 48S43525F03 | 2SC1815-GR |
| Diodes | | |
| D101 | 48T40477U01 | 1N4003 |
| D601 | 48T51582F01 | MA150 |
| D602 | 48T51582F01 | MA150 |
| D603 | 48T51582F01 | MA150 |
| D604 | 48T51582F01 | MA150 |
| D605 | 48T51582F01 | MA150 |
| D606 | 48T51582F01 | MA150 |
| D607 | 48T51582F01 | MA150 |
| D608 | 48T40477U01 | 1N4003 |
| D609 | 48T40477U01 | 1N4003 |

●: For multi-voltage model only ■: For single voltage model only Others: Common

| Symbol No. | Part No. | Description |
|--------------|-------------|--------------------------|
| D610 | 48T40477U01 | 1N4003 |
| D611 | 48T40477U01 | 1N4003 |
| D612 | 48T51582F01 | MA150 |
| ZD101 | 48T40150U33 | Zener, HZ6B-3 |
| ZD102 | 48T40150U80 | Zener, HZ20-2 |
| ZD103 | 48T40150U65 | Zener, HZ12B-2 |
| BD101 | 48T50629F01 | Bridge, WL-02 |
| | 48T47455F01 | Bridge, WL-02 |
| Jack & Fuses | | |
| E801 | 9T50261F01 | Jack, Remote Control |
| F101 | 65T42077U15 | Fuse, Semko (T800mA) |
| F102 | 65T42077U15 | Fuse, Semko (T800mA) |
| F103 | 65T42077U12 | Fuse, Semko (T400mA) |
| Capacitors | | |
| C101 | 23S40657F10 | Electrolytic 10 uF/16V |
| C102 | 23S40657F10 | Electrolytic 10 uF/16V |
| C103 | 23S41198U59 | Electrolytic 470 uF/50V |
| C104 | 23S41198U42 | Electrolytic 220 uF/25V |
| C105 | 23S41198U42 | Electrolytic 220 uF/25V |
| C106 | 23S41198U65 | Electrolytic 1000 pF/25V |
| C107 | 23S41198U56 | Electrolytic 470 uF/16V |
| C108 | 23S40657F14 | Electrolytic 100 uF/16V |
| C109 | 23S40657F28 | Electrolytic 1 uF/50V |
| C601 | 8S44505P61 | Ceramic 10000 pF |
| C602 | 8S44505P61 | Ceramic 10000 pF |
| C603 | 8S44505P61 | Ceramic 10000 pF |
| C604 | 8S44505P61 | Ceramic 10000 pF |
| C605 | 8S44505P61 | Ceramic 10000 pF |
| C606 | 8S44505P61 | Ceramic 10000 pF |
| C607 | 23S40657F05 | Electrolytic 22 uF/10V |
| C608 | 23S40657F07 | Electrolytic 47 uF/10V |
| C609 | 23S40657F10 | Electrolytic 10 uF/16V |
| C610 | 23S40657F07 | Electrolytic 47 uF/10V |
| C611 | 23S40657F07 | Electrolytic 47 uF/10V |
| C612 | 23S40657F10 | Electrolytic 10 uF/16V |
| C613 | 23S40657F09 | Electrolytic 220 uF/10V |

| Symbol No. | Part No. | Description |
|------------|------------|-------------|
| Resistors | | |
| R101 | 6S44593P57 | 470 ohm |
| R102 | 6S44593P75 | 2.7K ohm |
| R103 | 6S44593P75 | 2.7K ohm |
| R104 | 6S44593P61 | 680 ohm |
| R105 | 6S44593P61 | 680 ohm |
| R601 | 6S44594P06 | 47K ohm |
| R602 | 6S44594P06 | 47K ohm |
| R603 | 6S44593P45 | 150 ohm |
| R604 | 6S44593P47 | 180 ohm |
| R605 | 6S44593P77 | 3.3K ohm |
| R606 | 6S44593P87 | 8.2K ohm |
| R607 | 6S44593P75 | 2.7K ohm |
| R608 | 6S44593P97 | 22K ohm |
| R610 | 6S44593P89 | 10K ohm |
| R611 | 6S44593P89 | 10K ohm |
| R612 | 6S44593P97 | 22K ohm |
| R613 | 6S44594P06 | 47K ohm |
| R614 | 6S44593P89 | 10K ohm |
| R615 | 6S44593P59 | 560 ohm |
| R616 | 6S44593P73 | 2.2K ohm |
| R617 | 6S44593P59 | 560 ohm |
| R618 | 6S44593P73 | 2.2K ohm |
| R619 | 6S44593P59 | 560 ohm |
| R620 | 6S44593P73 | 2.2K ohm |
| R621 | 6S44593P93 | 15K ohm |
| R622 | 6S44593P89 | 10K ohm |
| R623 | 6S44594P06 | 47K ohm |
| R624 | 6S44593P89 | 10K ohm |
| R625 | 6S44594P14 | 100K ohm |
| R626 | 6S44593P85 | 6.8K ohm |
| R627 | 6S44593P91 | 12K ohm |
| R628 | 6S44593P89 | 10K ohm |
| R630 | 6S44593P75 | 3.9K ohm |
| R631 | 6S44594P02 | 33K ohm |
| R632 | 6S44593P69 | 1.5K ohm |
| R633 | 6S44593P63 | 820 ohm |
| R634 | 6S44593P87 | 8.2K ohm |
| R635 | 6S44593P97 | 22K ohm |
| R636 | 6S44594P06 | 47K ohm |
| R637 | 6S44593P97 | 22K ohm |
| R638 | 6S44594P06 | 47K ohm |

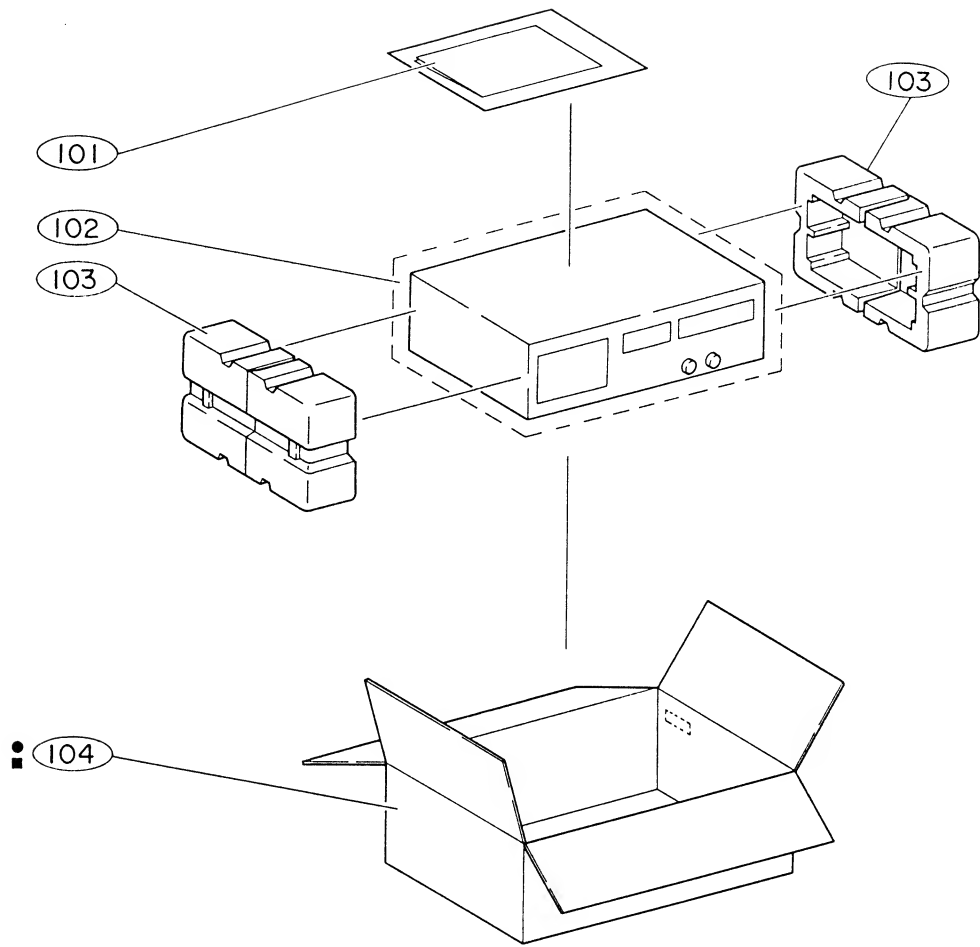
| Symbol No. | Part No. | Description |
|---------------------------|-------------|-------------------------|
| Switch & Volume P.C.Board | | |
| IC & Transistor | | |
| IC604 | 51T47738F01 | IC, TD62507P |
| Q651 | 48T43525F02 | Transistor, 2SC1815-Y |
| LED's | | |
| LED604 | 48T45564F01 | SLP-260C |
| LED605 | 48T45564F01 | SLP-260C |
| LED606 | 48T47746F01 | SLP-460C |
| LED607 | 48T45564F01 | SLP-260C |
| LED608 | 48T45564F01 | SLP-260C |
| Volume & Switches | | |
| VR401 | 18T47779F01 | Volume, Slide 5KA x 2 |
| VR551 | 18T47778F01 | Volume, Slide 1KB |
| S601 | 40T47745F01 | Switch, Push |
| S602 | | |
| S603 | | |
| S604 | | |
| S605 | | |
| S606 | | |
| S607 | | |
| S608 | | |
| D651 | 48T44813F01 | MA165TA |
| D652 | 48T44813F01 | MA165TA |
| D654 | 48T44813F01 | MA165TA |
| D655 | 48T44813F01 | MA165TA |
| D657 | 48T44813F01 | MA165TA |
| D658 | 48T44813F01 | MA165TA |
| D659 | 48T44813F01 | MA165TA |
| D660 | 48T44813F01 | MA165TA |
| D661 | 48T44813F01 | MA165TA |
| D662 | 48T44813F01 | MA165TA |
| D664 | 48T44813F01 | MA165TA |
| Capacitors | | |
| C651 | 23T43247F13 | Electrolytic 47 uF/10V |
| C652 | 23T43247F05 | Electrolytic 1 uF/50V |
| C653 | 23T43247F07 | Electrolytic 3.3 uF/25V |
| C654 | 23T43247F10 | Electrolytic 22 uF/16V |

| Symbol No. | Part No. | Description |
|-----------------------|------------|----------------------|
| Resistors | | |
| R552 | 6S44593P75 | 2.7K ohm |
| R652 | 6S44594P06 | 47K ohm |
| R653 | 6S44594P06 | 47K ohm |
| R654 | 6S44593P57 | 470 ohm |
| R655 | 6S44593P61 | 680 ohm |
| R656 | 6S44593P61 | 680 ohm |
| R657 | 6S44593P61 | 680 ohm |
| R658 | 6S44593P85 | 6.8K ohm |
| R659 | 6S44593P97 | 22K ohm |
| R660 | 6S44593P97 | 22K ohm |
| R661 | 6S44593P89 | 10K ohm |
| R662 | 6S44593P97 | 22K ohm |
| R663 | 6S44593P89 | 10K ohm |
| R664 | 6S44593P89 | 10K ohm |
| R665 | 6S44593P85 | 6.8K ohm |
| R666 | 6S44593P97 | 22K ohm |
| R667 | 6S44593P97 | 22K ohm |
| R668 | 6S44594P14 | 100K ohm |
| R669 | 6S44593P89 | 10K ohm |
| R670 | 6S44593P97 | 22K ohm |
| R671 | 6S44593P97 | 22K ohm |
| R672 | 6S44593P89 | 10K ohm |
| R673 | 6S44593P89 | 10K ohm |
| R674 | 6S44593P97 | 22K ohm |
| R675 | 6S44593P89 | 10K ohm |
| R676 | 6S44594P22 | 220K ohm |
| R677 | 6S44593P89 | 10K ohm |
| R678 | 6S44593P89 | 10K ohm |
| R679 | 6S44593P89 | 10K ohm |
| R680 | 6S44593P65 | 1K ohm |
| R681 | 6S44593P85 | 6.8K ohm |
| R682 | 6S44593P57 | 470 ohm |
| R683 | 6S44593P57 | 470 ohm |
| R684 | 6S44593P59 | 560 ohm |
| R685 | 6S44593P59 | 560 ohm |
| FL Counter P.C. Board | | |
| IC801 | 2401-0121 | LSI, HD38701A08 |
| E801 | 2401-0221 | FL Counter (FG46B5) |
| C801 | 2401-0411 | Cap., Ceramic 100 pF |
| R801 | 2401-0311 | Res., C Film 30K ohm |

●: For multi-voltage model only [○: General foreign model, △: Australian model, ☆: English model], ■: For single voltage model only [North American model] Others: Common

| Symbol No. | Part No. | Description |
|---------------|-------------|-----------------------------|
| Miscellaneous | | |
| D1 | AU11C-00 | Sensor, LED(TLN104) |
| E101 | 28T43812P02 | Plug, AC Cord |
| E101 | 28T40916U01 | Plug, AC Cord |
| E101 | 28T44061F02 | Cord, AC |
| E101 | 28T45338F01 | Plug, AC Cord |
| E402 | 72T47742F01 | Meter, Optical |
| LED601 | 48T45518F01 | LED, SEL 1331G |
| LED602 | 48T45519F01 | LED, SEL 1741Y |
| LED603 | 48T45517F01 | LED, SEL 1112R |
| HD1 | F029-105 | Head, Record/Play back |
| HD2 | F030-052 | Head, Erase |
| M1 | EG-510ED-2B | Assembly, Motor |
| PL-1 | 65T50260F01 | Lamp, Pilot |
| PL-4 | 65C42544U04 | Lamp, Pilot |
| Q1 | AZ11H-00 | Sensor, Transistor (TPS605) |
| S1 | FE173-11 | Switch, Slide |
| S2 | FE173-11 | Switch, Slide |
| S101 | 40T45561F01 | Switch, Power (SDL1P) |
| S101 | 40T47454F01 | Switch, Power (SDL1P) |
| S102 | 40T40705T01 | Switch, Select (Voltage) |
| S610 | 40T44505F01 | Switch, Touch (Play) |
| S611 | 40T44505F01 | Switch, Touch (Stop) |
| S612 | 40T44505F01 | Switch, Touch (F. Forward) |
| S613 | 40T44505F01 | Switch, Touch (Rewind) |
| S614 | 40T44505F01 | Switch, Touch (Pause) |
| S615 | 40T44505F01 | Switch, Touch (Record) |
| S616 | 40T44505F01 | Switch, Touch (Record Mute) |
| SL1 | F082-044 | Assembly, Solenoid |
| SL2 | PKA16106 | Assembly, Solenoid |
| SL3 | PKA16106 | Assembly, Solenoid |
| T101 | 25T44724F01 | Transformer, Power |
| | 25T50265F01 | Transformer, Power |
| VR503 | 18T40645F01 | Volume, Rotary |
| VR504 | 18T40645F01 | Volume, Rotary |

Packing Method



Packing Assembly Parts List

| Symbol No. | Part No. | Description |
|------------|-------------|--------------------------------|
| 101 | 1V46400F82 | Assembly, Pamphlet |
| 101-1 | 28T44352F01 | Plug, Output Cord |
| 101-2 | 56B40230G14 | Sack, Polyethylene |
| 101-3 | 68P44890F68 | Manual, Owner's |
| 102 | 56B40230G23 | sack, Polyethylene |
| 103 | 56C45556F01 | Tray, Packing |
| 104 | 56C44544F37 | Carton, Packing |
| | 56C44544F48 | Carton, Packing |
| Labels | | |
| | 54B42124G01 | Label, Serial No. (Rear Cover) |
| | 54B42124G02 | Label, Date Cord (Rear Cover) |
| | 54A41677U01 | Label, Head (R/P Head) |
| | 54B42541F06 | Label, Safety (Rear Cover) |
| | 54A44553G01 | Label, CSA (Rear Cover) |

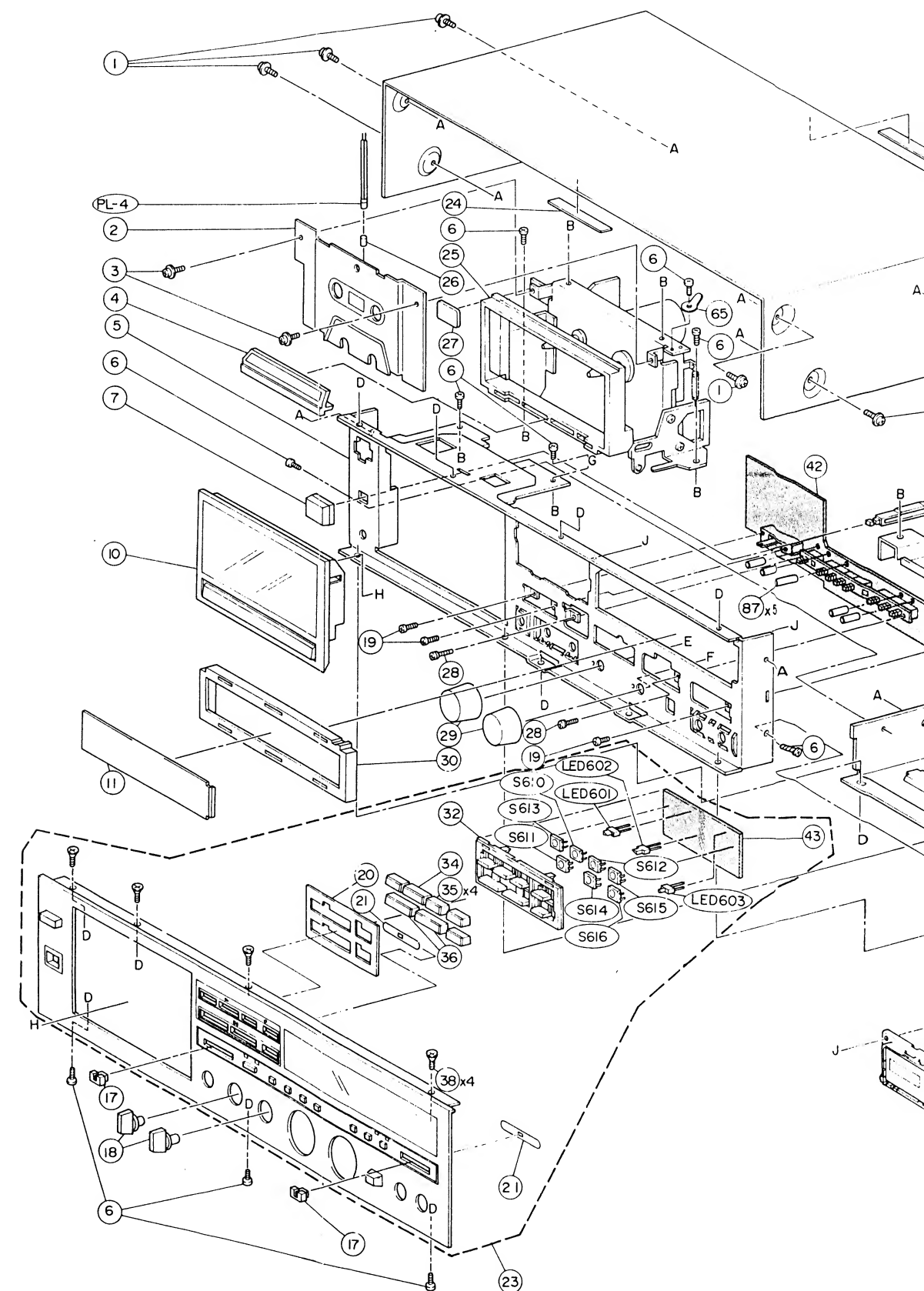
●: For multi-voltage model only [○: General foreign model, △: Australian model, ☆: English model], ■: For single voltage model only [North American model] Others: Common

Cabinet Assembly Parts List

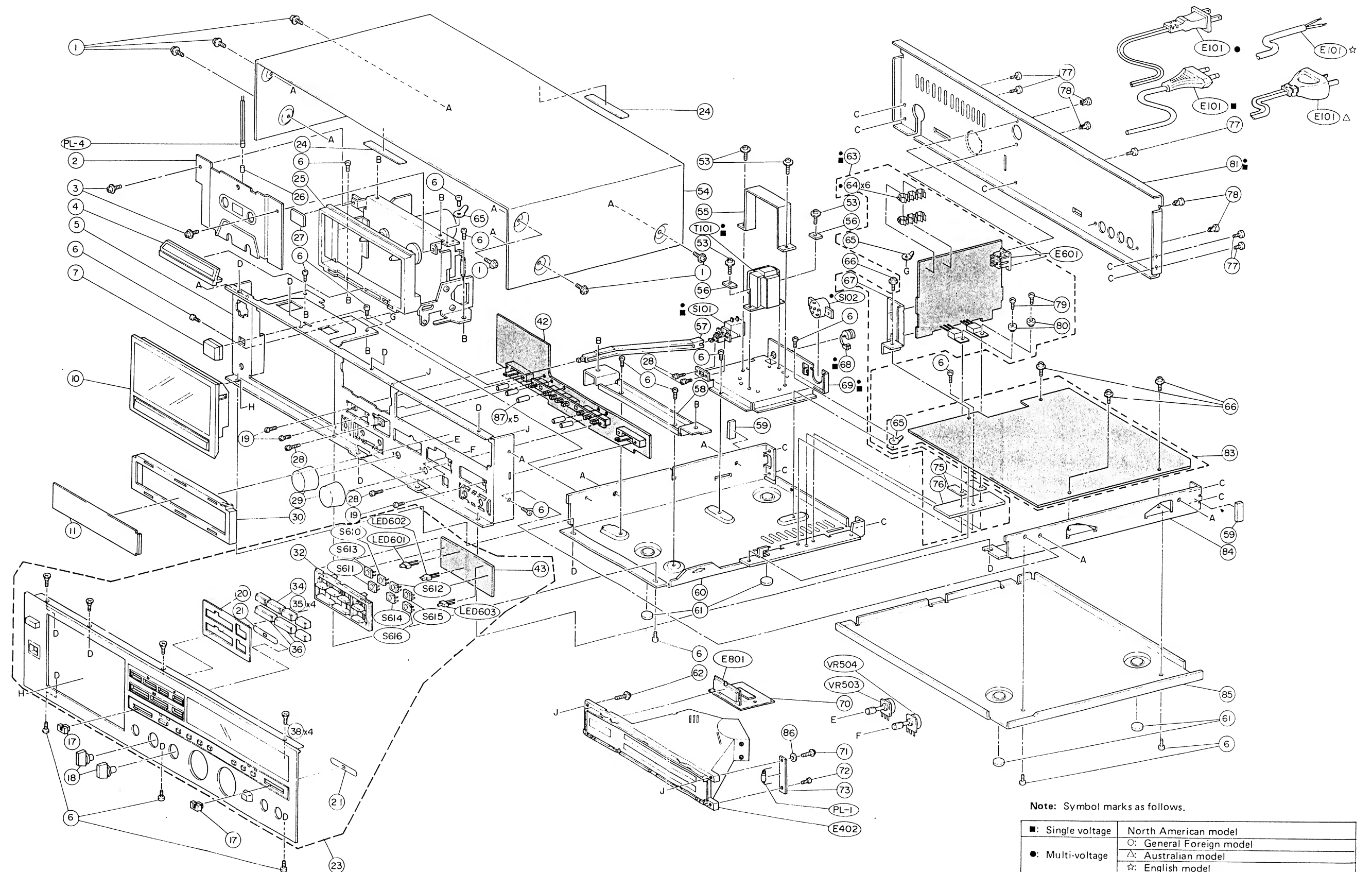
| Symbol No. | Part No. | Description | Symbol No. | Part No. | Description |
|------------|--------------|---|---------------|---------------|---------------------------|
| 1 | 3S40036U16 | Screw, Tap Tite (B/K) (M4 x 6) | 64 | ● 9T45548F01 | Holder, Fuse |
| 2 | 15B44924F04 | Cover, Dust | 65 | 29A41814G01 | Lug |
| 3 | 3S40036U06 | Screw, Tap Tite (M3 x 6) | 66 | 3C42723U01 | Screw, Cup |
| 4 | 13B45448F02 | Door, Escutcheon | 67 | 7B47370F01 | Support, P.C. Board |
| 5 | | Chassis, Front | 68 | ● 43B41625J02 | Support, Cord |
| | | | ■ 43B41625J01 | Support, Cord | |
| 6 | 3S44205G05 | Screw, Tap Tite (M3 x 5) | 69 | ● | Bracket, Transformer |
| 7 | 36A45460F01 | Knob, Power | ■ | | Bracket, Transformer |
| 10 | 1V46400F80 | Assembly, Door | 70 | 65T47743F01 | Counter, FL |
| 11 | 61B47368F01 | Crystal, Meter | 71 | 3S44205G08 | Screw, Tap Tite (M3 x 12) |
| 17 | 36A47372F01 | Knob, Control | 72 | 3S40018G01 | Screw, Tap Tite (M3 x 6) |
| | | | 73 | 84D47736F02 | Panel, Lamp |
| 18 | 36A45457F01 | Knob, Rotary Switch | 75 | 14A40472G02 | Insulator, Transistor |
| 19 | 3C40014G07 | Screw, Machine (M2 x 4) | 76 | | Bracket, Heat Sink |
| 20 | 26B51023F01 | Shield, Static Electricity | 77 | 3S44205G40 | Screw, Tap Tite (M3 x 4) |
| 21 | 43A47376F01 | Spacer, Volume | 78 | 5B41635J02 | Rivet, Push |
| 23 | 1V46400F78 | Assembly, Front Panel | 79 | 3A43146G01 | Screw, Machine (M2 x 6) |
| | | | 80 | 43A43182P01 | Spacer, Transistor |
| 24 | 75B44632G04 | Pad, Cushion | 81 | ● 15C45441F03 | Cover, Rear |
| 25 | 81T50752F01 | Deck, Cassette | ■ 15C45441F04 | Cover, Rear | |
| 26 | 43A41728U09 | Buch, Lamp | 82 | 84A45465F01 | Panel, Mute |
| 27 | 43A45760F01 | Spacer, Eject | 83 | 1V51300F63 | Assembly, Master Board |
| 28 | 3C40014G04 | Screw, Machine (M3 x 6) | 84 | | Chassis, Side |
| | | | 85 | | Cover, Bottom |
| 29 | 36A47844F01 | Knob, Control | 86 | 4S40075G16 | Washer S.T.W. |
| 30 | 7B47367F01 | Frame, Meter | 87 | 43A51441F01 | Spacer LED |
| 32 | 36C45466F01 | Knob, Function Key | | | |
| 34 | 36A45455F01 | Knob, Function (20) (Play) | | | |
| 35 | 36A45454F01 | Knob, Function (15) (Rew, FF, Rec, Mute) | | | |
| | | | | | |
| 36 | 36A45456F01 | Knob, Function (25.5) | | | |
| 38 | 3S44205G16 | Screw, Tap Tite (M3 x 6) | | | |
| 42 | 1V46400F75 | Assembly, Switch & Volume P.C. Board | | | |
| 43 | 84B45552F01 | Panel, Knob Switch | | | |
| 53 | 3S40036U07 | Screw, Tap Tite (M4 x 12) | | | |
| | | | | | |
| 54 | 15D45442F02 | Cover, Top | | | |
| 55 | | Support, Transformer | | | |
| 56 | 7A40871F01 | Support, Transformer | | | |
| 57 | 45B45465F01 | Lever, Power Switch | | | |
| 58 | 7B45444F01 | Support, Tape Deck | | | |
| | | | | | |
| 59 | 75A42565P13 | Cushion, Rubber | | | |
| 60 | | Chassis, Bottom | | | |
| 61 | 75A44348F01 | Pad, Felt | | | |
| 62 | 3S44205G38 | Screw, Tap Tite (M3 x 6) | | | |
| 63 | ● 1V46400F76 | Assembly, Power & Control P.C. Board | | | |
| | ■ 1V51300F94 | Assembly, Power & Control P.C. Board | | | |

●: For multi-voltage model only ■: For single voltage model only Others: Common
NOTE: The parts without part numbers are not supplied.

Exploded View (Cabinet)



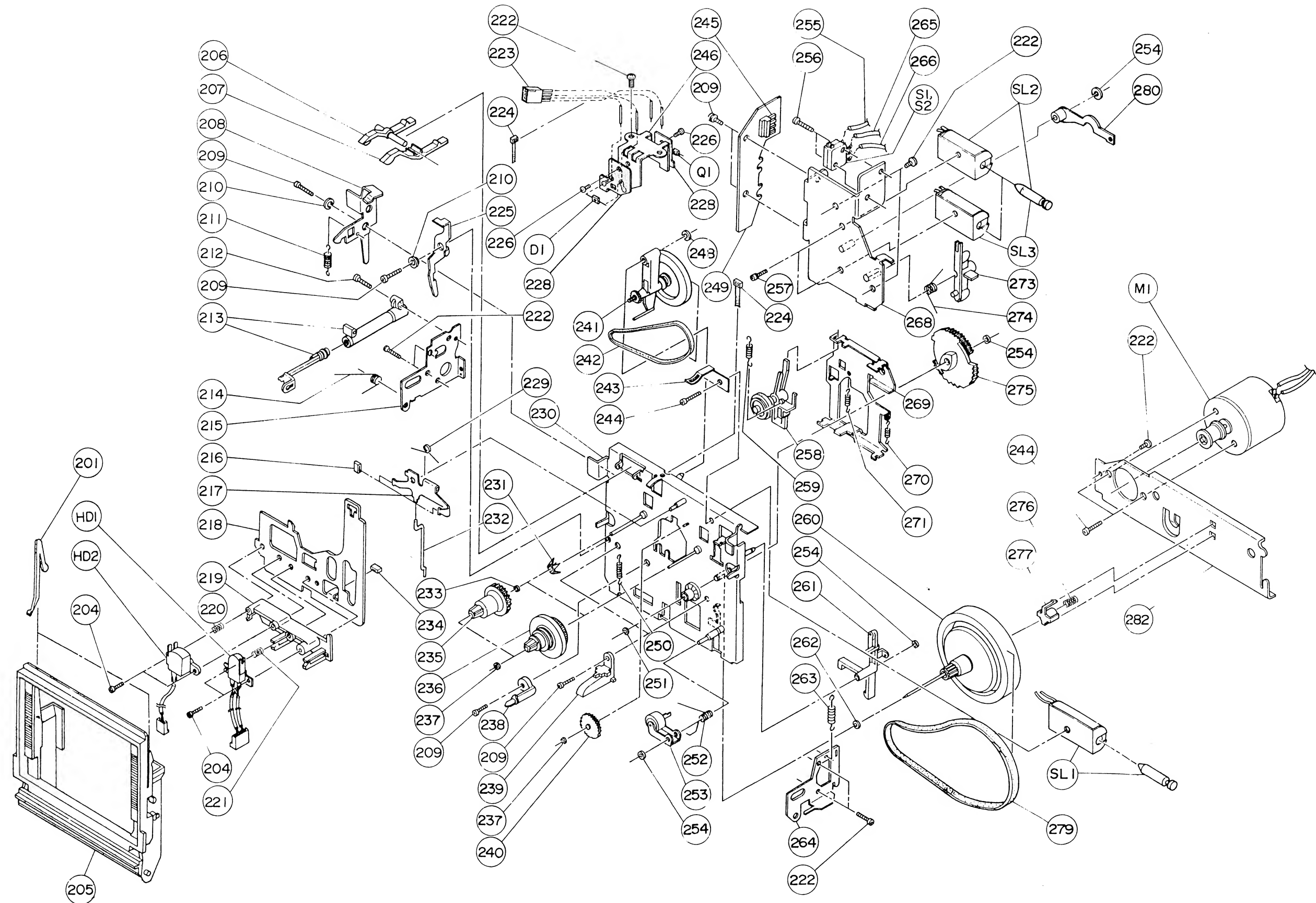
Exploded View (Cabinet)



Note: Symbol marks as follows.

| | |
|--|--------------------------|
| ■: Single voltage | North American model |
| ●: Multi-voltage | ○: General Foreign model |
| | △: Australian model |
| | ☆: English model |
| When only the mark "●" is used, all ○, △ and ☆ marks are included. | |

Exploded View (Cassette Deck)

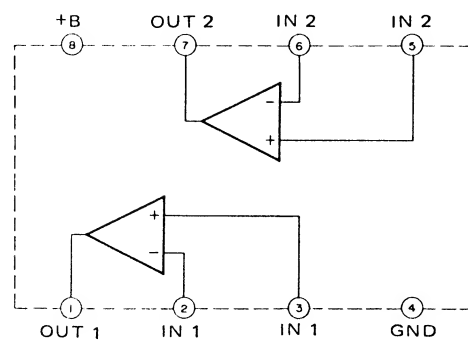
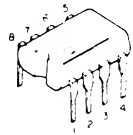


Cassette Deck Assembly Parts List

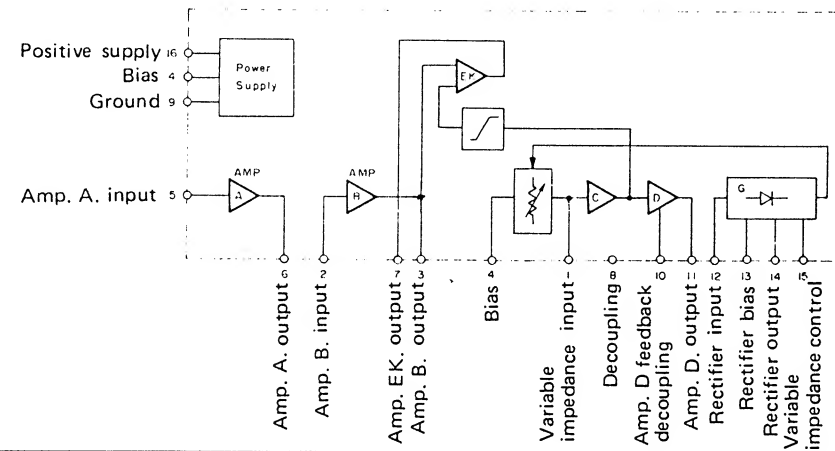
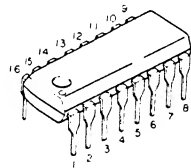
| Symbol No. | Index | Part No. | Description | Symbol No. | Index | Part No. | Description |
|------------|-------|----------|--|------------|-------|-------------|---|
| 201 | 3-A | FK553-12 | Spring, Hold | 240 | 2-D | FN154-13 | Gear, Idler |
| 204 | 4-A | FG137-15 | Screw, F-Lock (M2 x 13) | 241 | 2-D | FP470-11 | Assembly, Clutch |
| 205 | 5-A | FR369-11 | Frame, Door | 242 | 3-D | FP463-11 | Belt, Sub |
| 206 | 1-B | FR357-14 | Arm, Record | 243 | 3-D | FK551-13 | Spring, Cassette |
| 207 | 1-B | FR356-13 | Arm, Switch | 244 | 3-D | FG114-15 | Screw, Washer (M2.6 x 4.5) |
| 208 | 1-B | FC11H-12 | Arm, Lock Eject | 245 | 1-E | KY130-11 | Connector (8P) |
| 209 | 2-B | KG194-12 | Screw, Tap Tite (M3 x 6) | 246 | 1-E | FC15H-11 | Bracket, Sensor |
| 210 | 2-B | FM296-11 | Spacer | 248 | 2-E | FJ123-19 | Washer, Lock (φ3.5) |
| 211 | 2-B | FK573-11 | Spring, Arm Lock | 249 | 2-E | FP11N-11 | Panel, Connector |
| 212 | 2-B | UG11D-11 | Screw, Tap Tite (M2 x 12) | 250 | 4-D | FK578-12 | Spring, Head Base Hold |
| 213 | 2-B | FP472-11 | Assembly, Dumper | 251 | 4-D | FJ141-12 | Washer, Oil Shield |
| 214 | 3-B | FK568-11 | Spring, Door | 252 | 5-D | FK569-12 | Spring, Pinch Roller |
| 215 | 3-B | FR349-13 | Bracket, Dumper | 253 | 5-D | F014-053 | Assembly, Pinch Roller |
| 216 | 3-B | FF11C-11 | Rubber, Brake | 254 | 5-D | FJ123-15 | Washer, Lock (φ2.6) |
| 217 | 3-B | FC15G-11 | Lever, Brake | 255 | 1-E | | Tube, Vinyl (Blue) |
| 218 | 4-B | | Base, Head | 256 | 1-E | FG143-26 | Screw, Machine (M2.6 x 15) |
| 219 | 4-B | FM283-13 | Spacer, Head | 257 | 2-E | FG143-17 | Screw, Machine (M2.6 x 3) |
| 220 | 4-B | FK572-12 | Spring, Azimuth | 258 | 3-E | FP469-11 | Assembly, Idler |
| 221 | 5-B | FK572-11 | Spring, Azimuth | 259 | 3-E | FK575-11 | Spring, Play Idler |
| 222 | 1-D | KG194-46 | Screw, Tap Tite (M3 x 4) | 260 | 3-E | 49B50559F01 | Assembly, Flywheel |
| 223 | 1-D | WH16A-00 | Connector, Wire | 261 | 4-E | FR359-12 | Arm, Play Solenoid |
| 224 | 1-D | FH126-11 | Band, Connector | 262 | 4-E | FJ111-14 | Polyester Slider (Flywheel) (φ2.5 x 0.5) |
| 225 | 2-C | FR352-11 | Lever, Safety | 263 | 4-E | FK576-12 | Spring, Play Solenoid Arm |
| 226 | 2-C | FG137-11 | Screw, F-Lock | 264 | 5-E | FR350-12 | Bracket, Door |
| 228 | 2-D | FP11E-11 | Panel, Sensor | 265 | 1-F | | Tube, Vinyl (Brn) |
| 229 | 3-D | FK12A-11 | Spring, Brake | 266 | 1-F | | Tube, Vinyl (Red) |
| 230 | 3-D | | Assembly, Chassis | 268 | 2-F | | Bracket, Solenoid |
| 231 | 3-C | FK579-11 | Spring, Back Tension | 269 | 3-F | FR346-11 | Base, Assist |
| 232 | 3-C | FK11Y-11 | Rod, Brake | 270 | 3-F | | Spring, Assist |
| 233 | 4-C | FJ111-19 | Polyester Slider (Supply Reel) (φ2 x 0.13) | 271 | 3-F | FK577-12 | Spring, Head Base |
| 234 | 4-C | FP464-11 | Pad, Cushion | 273 | 2-F | FR355-13 | Arm, FF Solenoid |
| 235 | 4-C | FR12P-11 | Assembly, Supply Reel | 274 | 2-F | FK570-12 | Spring, Solenoid Bracket |
| 236 | 4-C | FR12N-11 | Assembly, Take-up Reel | 275 | 3-F | FN153-11 | Gear, Play |
| 237 | 5-C | FJ123-14 | Washer, Lock (φ1.7) | 276 | 3-F | FK11F-16 | Spring, Thrust |
| 238 | 5-C | FR358-12 | Guide, Reference | 277 | 4-F | FM281-12 | Spacer, Flywheel |
| 239 | 5-C | FR360-12 | Guide, Cassette | 279 | 5-F | FP462-11 | Belt, Main |
| | | | | 280 | 1-G | FD12W-11 | Arm, Brake |
| | | | | 282 | 4-G | FR347-12 | Bracket, Motor |

NOTE: The parts without parts numbers are not supplied.

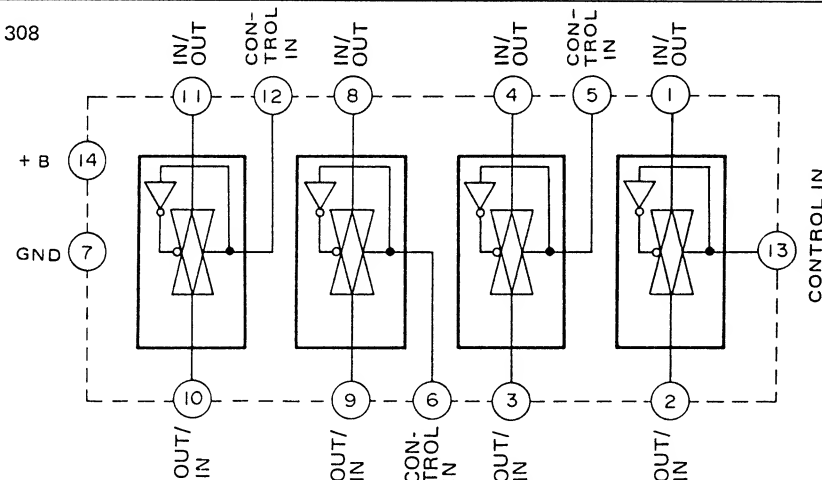
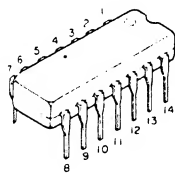
Semi-Conductor Lead Identifications

 μ PC4558C: IC201, 309, 501

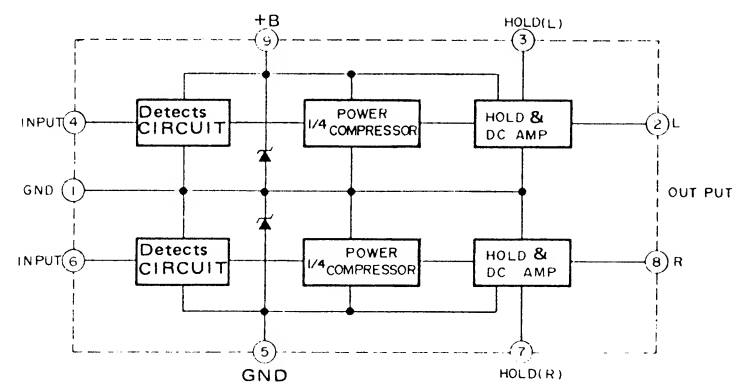
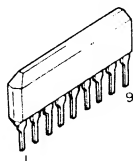
LM1111A: IC301, 302, 303, 304



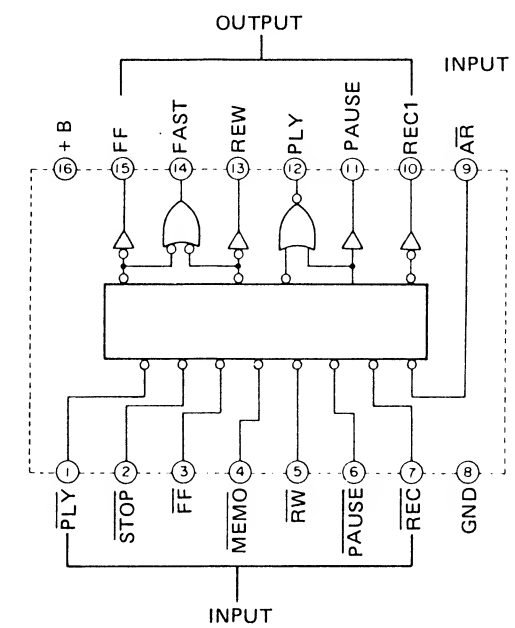
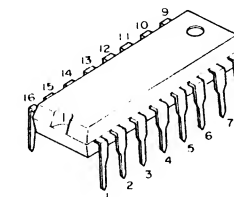
TC4066BP or MC14066BCP: IC305, 306, 307, 308



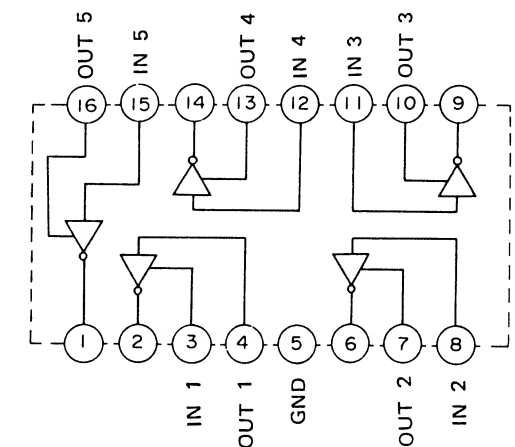
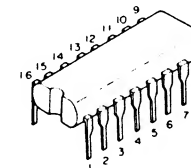
TA7318AP-2: IC401



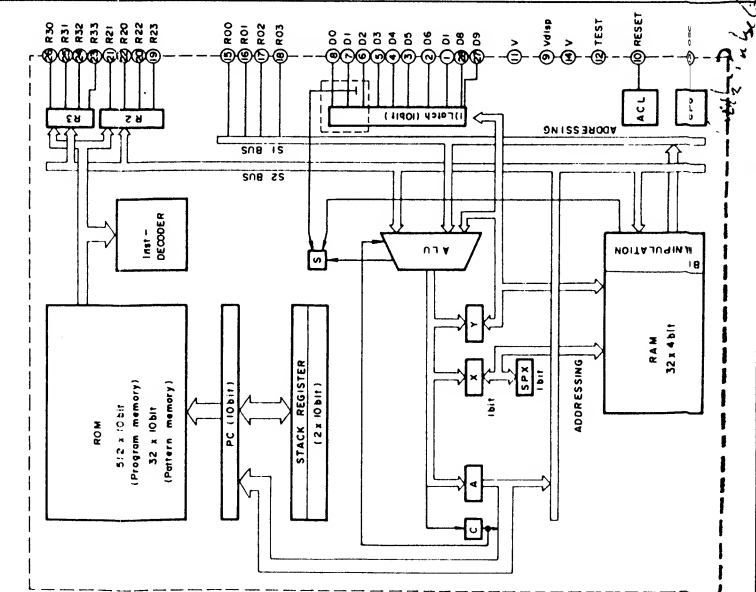
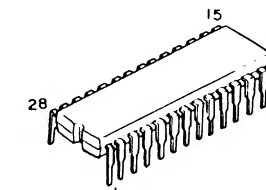
BA843: IC601



TD62507P: IC602, 603, 604, 901



HD38701A08: IC801



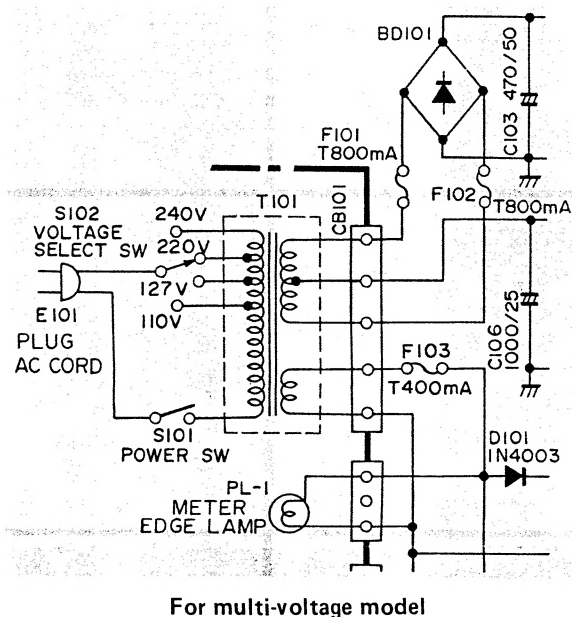
| IC | IC 601 | IC 602 | IC 603 |
|------------|------------------------------|--|--|
| Transistor | Q101, Q601, Q102, Q103, Q602 | | Q606, Q603 |
| Diode | LED601 LED602 LED603 | BD101 D601 ZD101 D101 ZD102 ZD103 D602 D603 D604 | LED604 LED605 D606, D607 D664 |

Notes:

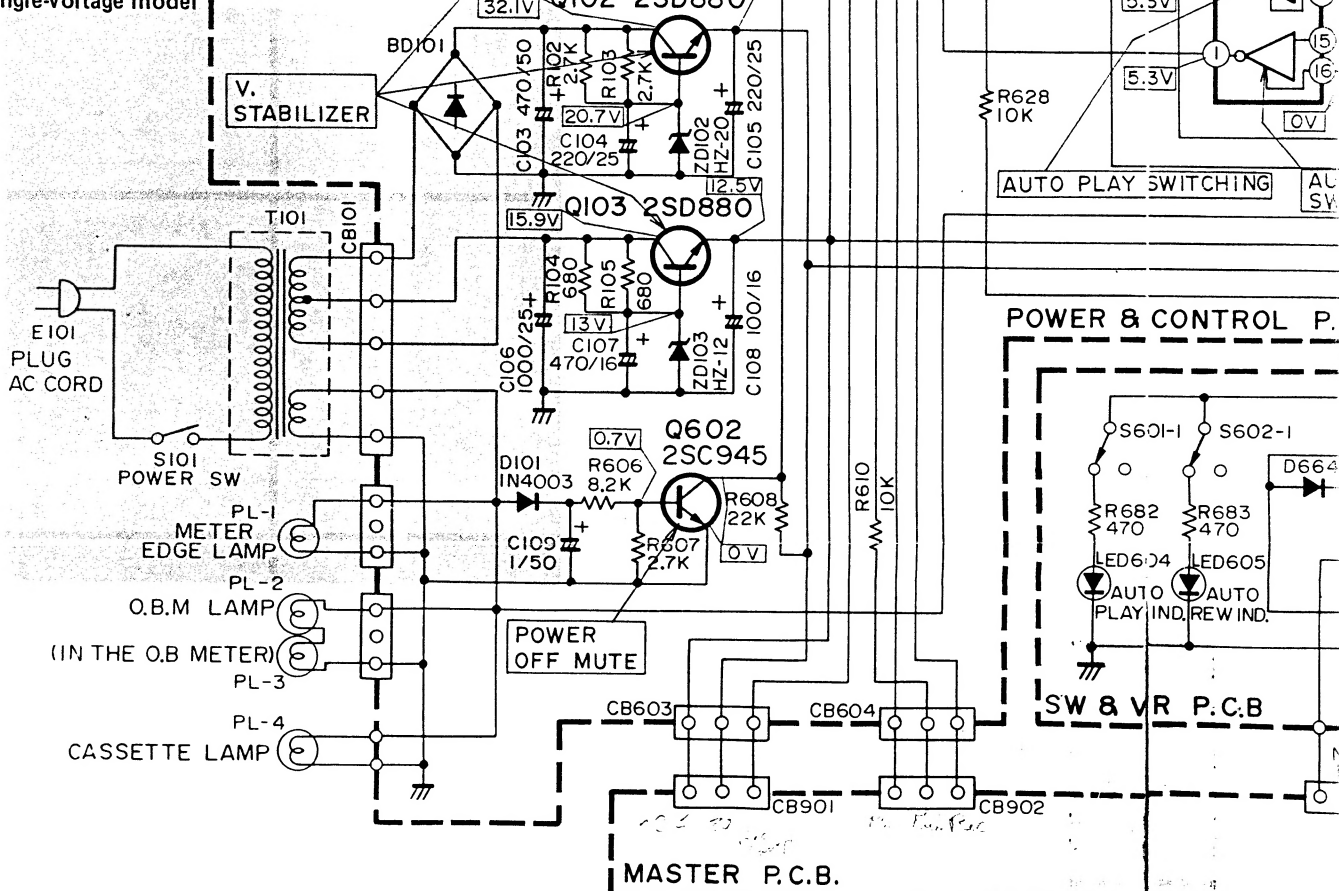
- (1) All resistance values are in ohm, K = 1,000, M = 1,000,000.
- (2) All resistance values are in microfarads, P = 1/1,000,000.
- (3) Unspecified voltages are measured in stop mode.
- (4) Switch position
- (5) Semiconductors

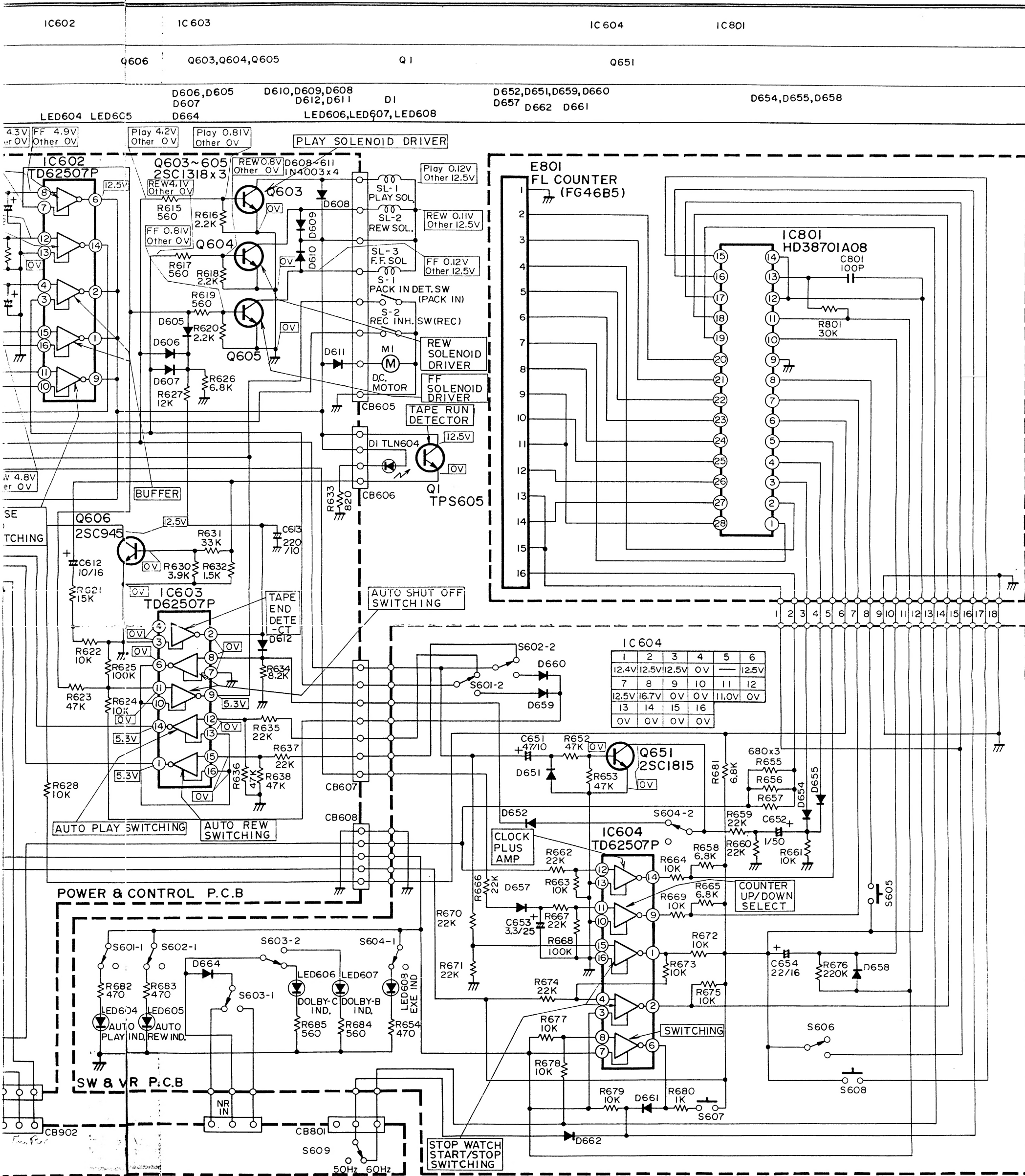
| | |
|---|------------------|
| IC601 | BA843 |
| IC602 to 604 | TD62507P |
| IC801 | HD38701A08 |
| Q1 | TPS605 |
| Q101, 603 to 605 | 2SC509/2SC1318 |
| Q102, 103 | 2SD880/2SD235 |
| Q601, 602, 606, 651 | 2SC1815, 2SC1684 |
| D1 | TLN604 |
| D101, 608 to 611 | 1N4003/10E2 |
| D601 to 607, 612 651, 652, 654, 655 657 to 662, 664 | 1S1555/MA165 |
| BD101 | WL02 |

(b) For pin connection of IC, refer to "Semiconductors Lead Identifications".

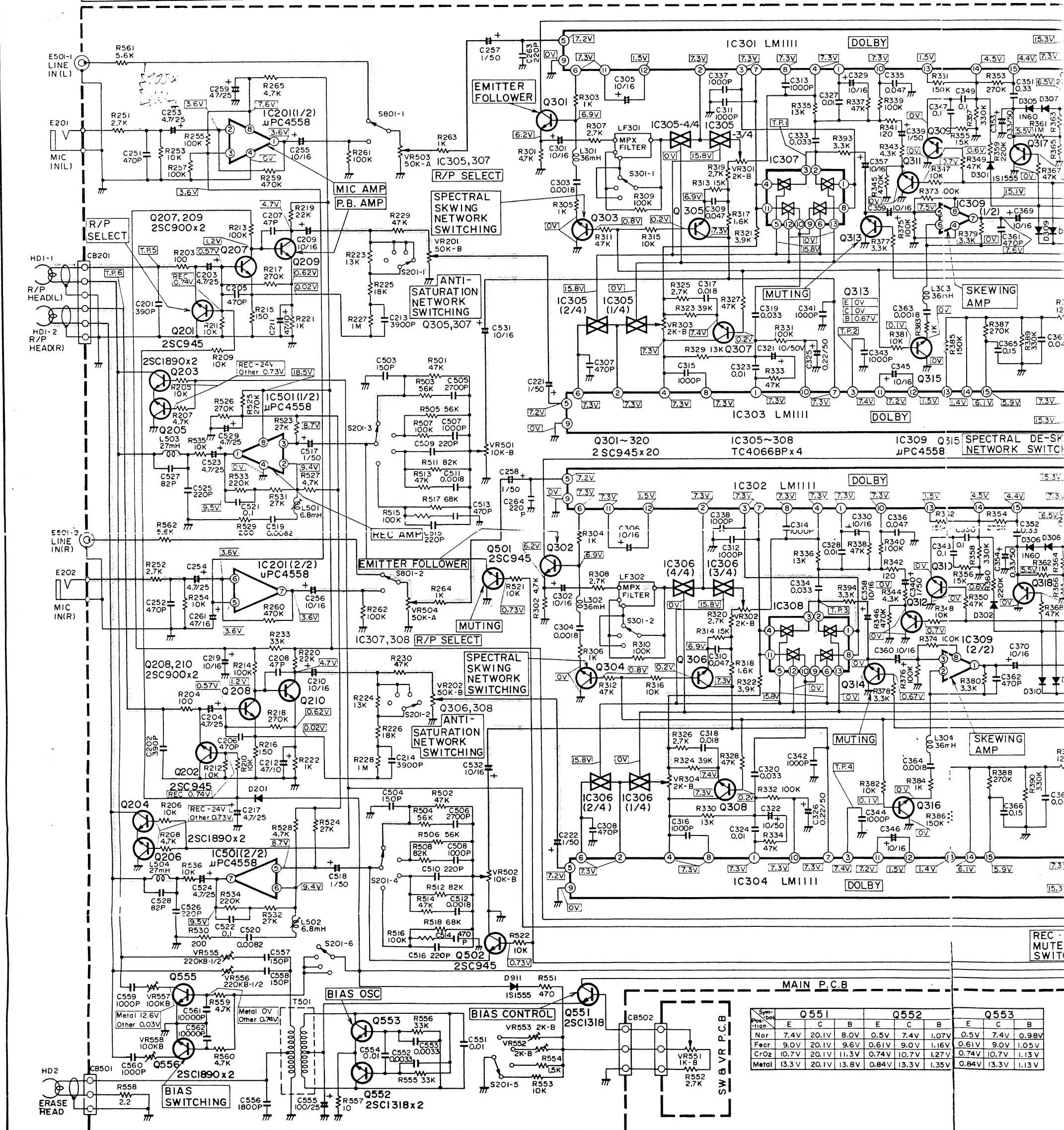


For single-voltage model



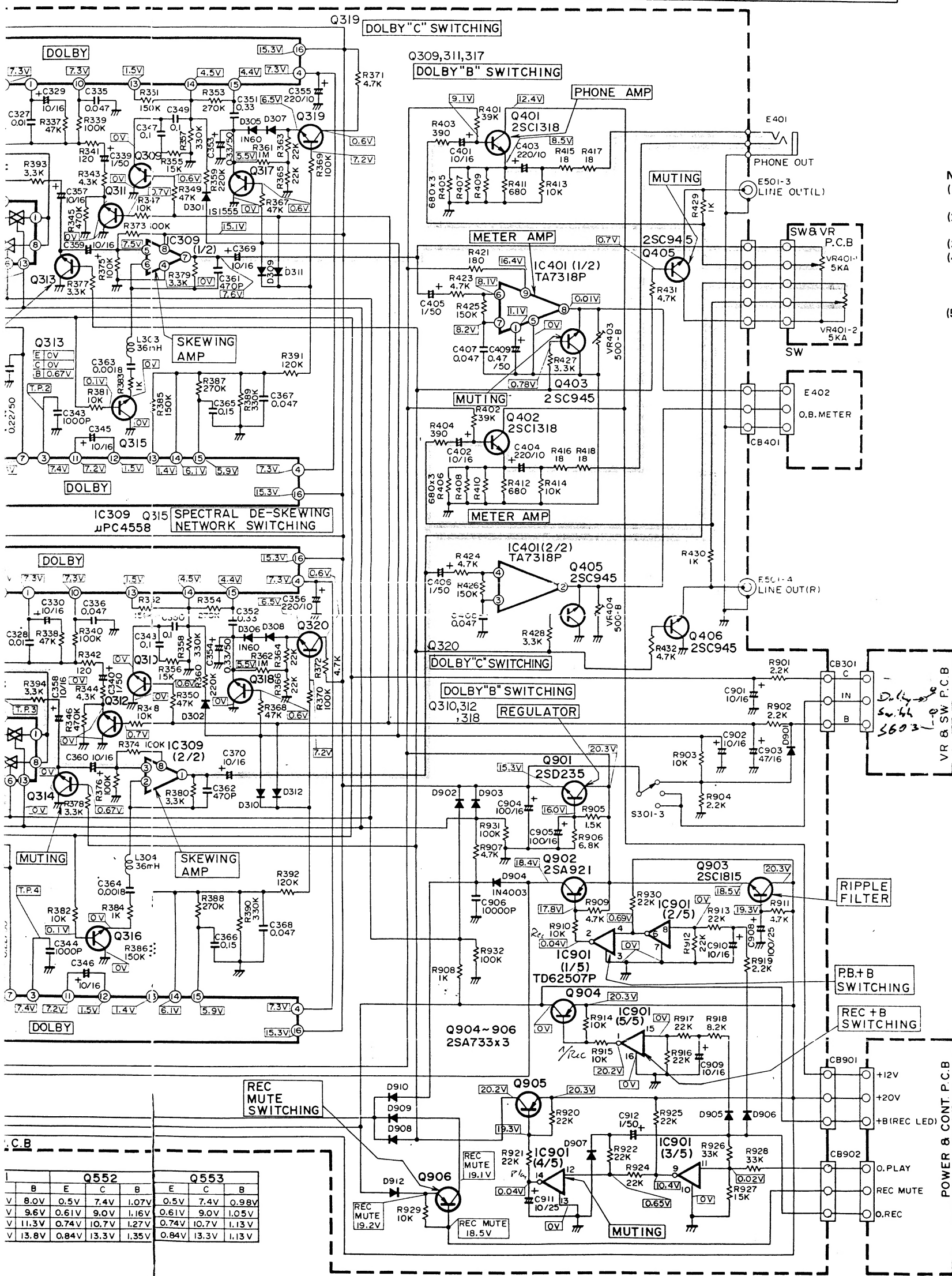


| IC | IC201, IC501 | | | | | | | | | | IC305 IC306 | | IC301 IC303 | IC302 IC304 | IC307 IC308 | IC309 | | | | | |
|------------|----------------------|-----|--|--------------|--------------|--------------|--------------|------|--|--|----------------|--------------|----------------|----------------|----------------|--------------|--------------------------|--------------|--------------|------|--------------|
| Transistor | Q201 Q555 Q556 | 210 | | Q553 Q552 | Q501 Q502 | Q301 Q302 | Q303 Q304 | Q551 | | | | Q305 Q306 | Q307 Q308 | | | Q313 Q314 | Q311, Q315 Q312, Q316 | Q309 Q310 | | | Q317 Q318 |
| Diode | D201 | | | | D911 | | | | | | | | | | | | | | D301 D302 | D303 | |



| Sym- bol Pos- ition | Q551 | | | Q552 | | | Q553 | | |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | E | C | B | E | C | B | E | C | B |
| Nor | 7.4V | 20.1V | 8.0V | 0.5V | 7.4V | 1.07V | 0.5V | 7.4V | 0.98V |
| Fecr | 9.0V | 20.1V | 9.6V | 0.61V | 9.0V | 1.16V | 0.61V | 9.0V | 1.05V |
| CrO2 | 10.7V | 20.1V | 11.3V | 0.74V | 10.7V | 1.27V | 0.74V | 10.7V | 1.13V |
| Metal | 13.3V | 20.1V | 13.8V | 0.84V | 13.3V | 1.35V | 0.84V | 13.3V | 1.13V |

| C307 C308 | IC309 | IC401 | IC901 |
|--------------|--|--------------------------------------|------------------------------|
| Q313 Q314 | Q311, Q315 Q312, Q316 Q309 Q310 | Q401 Q402 Q901 Q902 Q904 | Q403 Q404 Q405 Q406 |
| | D301 D302 | D910, 909 D908, 909 | D902, 903 D904 D907 |
| | D305, D307 D309, D311 D306, D308, D310, D312 | | D905 D906 D901 |



Notes:

- (1) All resistance values are in ohms. K = 1,000, M = 1,000,000.
- (2) All capacitance values are in microfarads. P = 1/1,000,000.
- (3) Unspecified voltages are measured in stop mode.
- (4) Switch position
S201 (Tape Select): Metal position
S301 (Dolby NR/MPX Filter): (Both) Off position
S801 (Input Select): Line position
- (5) Semiconductors

| | |
|---|-------------------------|
| IC201, 309, 501 | μPC4558 |
| IC301 to 304 | LM1111A |
| IC305, 306, 307, 308 | TC4066BP/ MC14066BCP |
| IC401 | TA7318AP |
| IC901 | TD62507P |
| Q201, 202, 301 to 320, Q403, to 406, 501, 502, Q903 | 2SC945/2SC1815 |
| Q203 to 206, 555, 556 | 2SC1890/2SC1980 |
| Q207 to 210 | 2SC900/2SC732 |
| Q401, 402, 551 to 553 | 2SC1318/2SC509 |
| Q901 | 2SD235/2SD88U |
| Q904 to 906 | 2SA733 |
| Q902 | 2SA921 |
| D904 | 1N4003/10E2 |
| D201, 301, 302, 307 to 312 D901 to 903, 905 to 912 | MA150 |
| D305, 306 | 1N60 |

For pin connection of IC's, refer to "Semiconductors Lead Identifications".

Dolby Switch S301
At " " S201